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THE

McGILL NEWS

VOLUME 12 DECEMBER, 1930 NUMBER 1

CONTENTS

THE FACULTY OF LAW
by P. E. CORBETT

THE LATIN QUARTER
by J. DELISLE PARKER

OUR POWER HOUSE: THE SUN
by A. S. EVE

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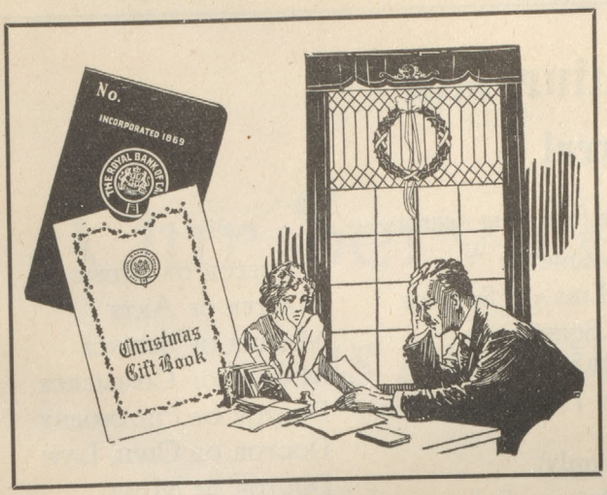
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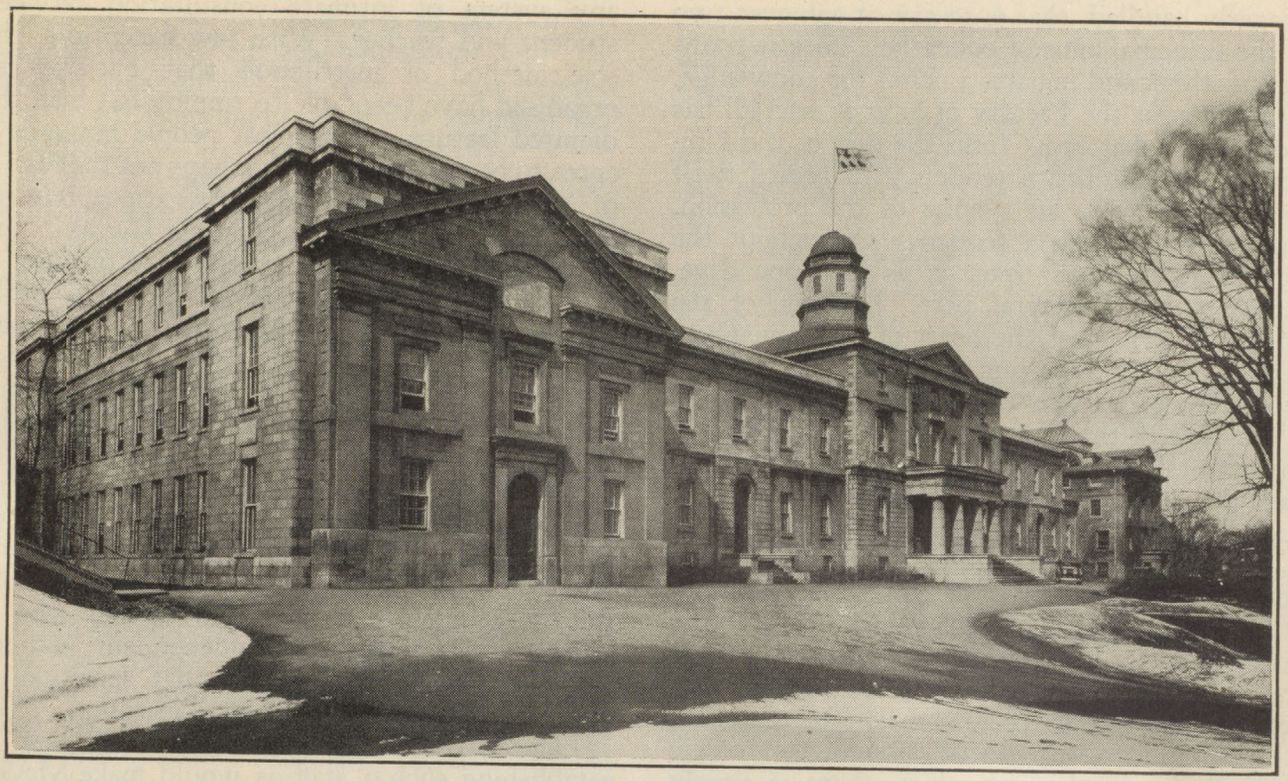


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THE ARTS BUILDING AS IT APPEARS TO-DAY

This photograph, taken recently, shows, from left to right, Molson Hall, the Main Building, and the East, or Administrative, Wing. Flying from the cupola is the University banner, bearing the crown which distinguishes a royal institution, and the scarlet martlets of McGill.

The Faculty of Law

By DEAN P. E. CORBETT

FACULTIES of Law have had a history in this country radically different from their history in Europe. In Europe, the universities have for ages taught law as one medium of liberal education. The idea of preparation for practice has been more or less incidental. In this country on the other hand, schools and faculties of law have been offshoots of the Bar Associations. The universities have been used as agencies for the preparation of students for the legal profession, and that idea has dominated, until quite recently, the organisation of staff and arrangement of work. Within the last few years, however, there has been, even in Canada, which in this respect lags behind the United States, a widespread revolt against this conception of the law school. Particularly at McGill, Toronto, Osgoode Hall, and Dalhousie, more emphasis is being put upon the treatment of the law-course as something of much wider significance than the mere provision for the training of candidates in the mechanical expertness necessary to earn a living in the practice of law.

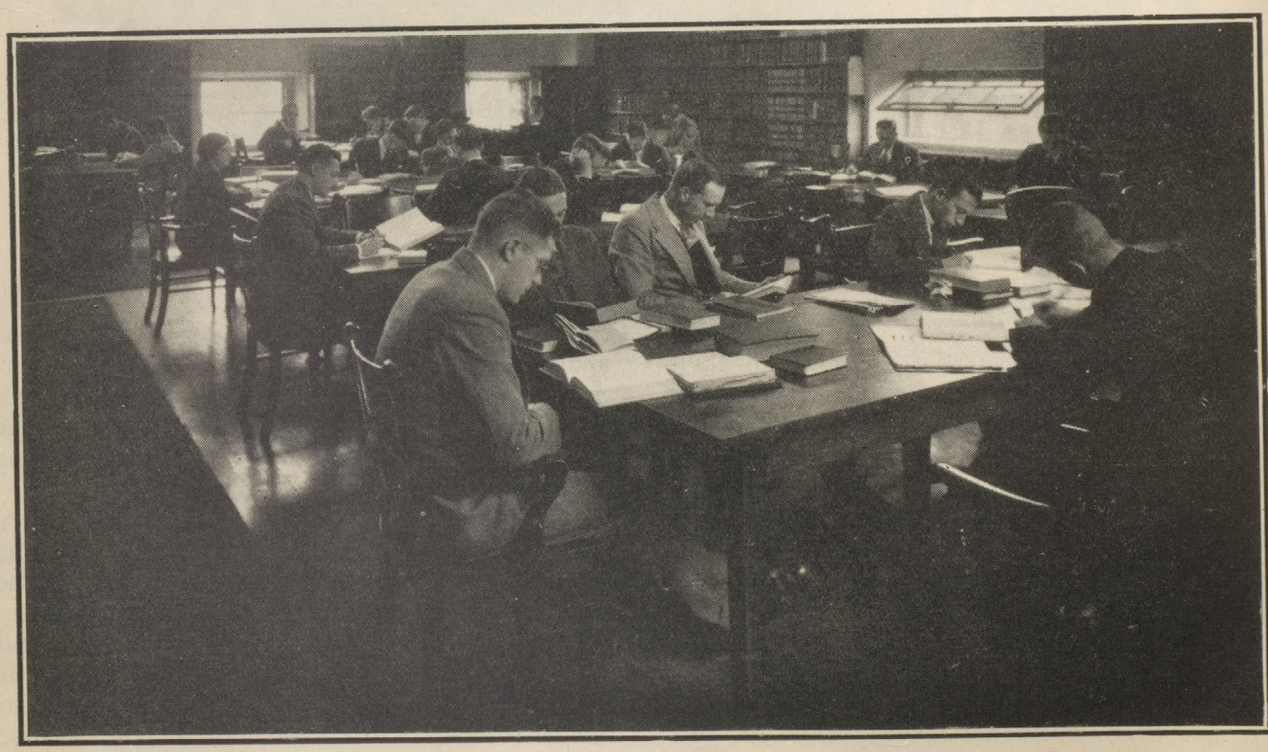
If the sole possible concern of the university with legal study were the training of men for the profession, it would be difficult to justify the inclusion of faculties of law in university organisation. But law is studied everywhere as a mental discipline, and as one of the social sciences. It can claim high rank as a medium of education in the best sense of the term, not merely because it is admirably calculated to develop mental dexterity, but because it opens up so many new avenues of enquiry to the inquisitive mind.

Properly handled, that is to say, it achieves two of the principal aims of education, since it trains men to think and imparts a thirst for knowledge.

In the past the Faculty of Law at McGill has stood somewhat apart from the rest of the University. It has had a tendency to regard itself too exclusively as an avenue to the profession, and there has been a tendency throughout the University to look upon it as an appendage, rather than an integral part. But one of the objects now nearest the heart of many members of the Faculty is to put an end to this idea of separateness, to win unquestioning recognition of the title of the law curriculum to rank among the essential divisions of university work, and to have the law man regarded by the whole student-body as, in the fullest sense, a fellow-student.

The desire to impart an understanding of law, not as a fixed set of rules of semi-mystical origin, but as a changing social instrument, and at the same time to give to legal study its proper status among the sciences pursued by the University, has led to reorganisation of the Law Faculty and to substantial modification of its curriculum. In the first place, there is slowly being built up a full-time staff. It is impossible for a Faculty, manned exclusively by successful and busy practising lawyers or judges, either to prosecute active legal research, or to maintain any system of intimate consultation between student and teacher. With few exceptions, the sole method of instruction that Faculties so organised have been able to employ has been the dictated lecture, which most people now-a-days agree to be only one—and perhaps not the best—of the possible methods. An atmosphere of research is as essential in teaching law as in any other science. The primary object of teaching—at least at the university level—is, it will probably be conceded, to induce thinking. Any man who acts merely as a conveyer of knowledge acquired by someone else is likely to become desiccated early in his career, in which event he becomes a dead burden to the University and to the student. There are, of course, exceptions—men who have never done original work, but whose joy in watching the formation of the young mind keeps them fresh in the power of inspiration. But, in general, it is only the teacher who is pursuing some path of independent enquiry who can set up and sustain that sensation of discovery which is the soul of all learning.

Limited resources have impeded the task of establishing such a staff as would make McGill a centre of legal research worthy of its magnificent opportunity. At present, the Faculty has only three full-time professors—one in civil, another in constitutional and federal, and a third in



THE LAW LIBRARY

This photograph, taken specially for the *News*, shows the library on a day in November. Marked increase in use of the library has been a feature in the Faculty of Law's recent development.

Roman law. One of these acts as dean. There is as yet no chair of legal philosophy and comparative law, subjects of the greatest interest here at the meeting-place of the common and civil systems.

As for the curriculum, that has been arranged on the assumption that we have full command of the student's time. In 1925, an amendment to the Bar Act was obtained to enable candidates to qualify for the profession by three years' full-time work in a law Faculty, followed by one year as indentured clerk in an office. This was to be an alternative to the older plan of three years' concurrent University and office attendance. Actually, very few students adopt the alternative, but that does not mean that the change has failed of its purpose. The Faculty makes no allowance in time-table, amount of work, or standards exacted, for office-attendance. It treats the undergraduate as a full-time student who must comply with its requirements. If, in addition, he can find spare time to spend in an office, that is his affair. The work required here is of a kind to make a reasonably full day for most students. But our mode of taking advantage of this change from a system which used to limit lectures to early morning and late afternoon has not been to increase lectures. On the contrary, we have reduced the number of formal class hours. What we have done is to demand more reading and more writing, and in this we have been fully successful, witness—as one of several proofs—the extraordinary increase in the use of our excellent library. We have thrown upon the student more responsibility for getting his own information, because we believe this to be the most effective method of education; and our keen desire is to limit mere dictation to the smallest possible rôle.

It may be of interest to graduates to know how many aspirants to large legal incomes are being subjected to this new staff and these new methods. Our registration now fluctuates between eighty and ninety-five, as against an average of forty-six for the years 1900 to 1913. I am leaving out of account the abnormal post-war years between 1919 and 1922, when as many as one hundred and thirty-five students were in attendance.

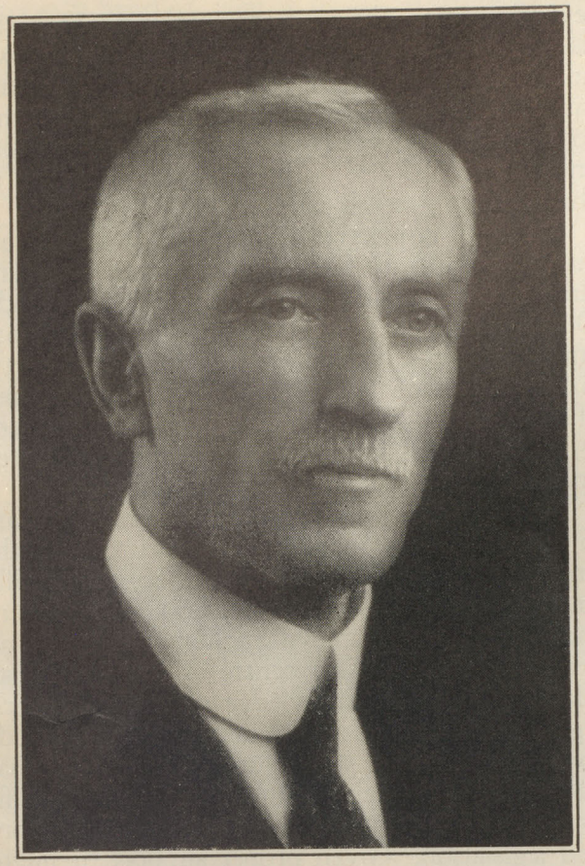
There is very little prospect of a great increase in our numbers in any near future, for the English-speaking Bar continues to be numerically small. That fact should not, however, prevent the Faculty from achieving a high position as an academy of law. As a centre of research it can add to the sparse knowledge of the fascinating legal history of this province, and can provide something further, which up to the present has been almost entirely lacking, namely—scientific examination and criticism of legal institutions and legislation. Given proper support, it might even disseminate something approaching that *doctrine* which, in a country like France, plays so large a part in the adaptation of law to the changing needs and circumstances of social existence.

Henry Martyn MacKay

By E. BROWN

BY the death of Henry Martyn MacKay, McGill University has lost the services of a truly remarkable man. Born in the province which has furnished many leaders in the national life of our Dominion, he served his country and his Alma Mater in his own unostentatious way. By the grace and charm of his personality he won the affection of his colleagues, and of generations of students in the Faculty of Applied Science. A brilliant graduate of Dalhousie and of McGill, he rose quickly to a distinguished position in the engineering profession, before joining the staff of the Faculty of Applied Science in 1905. From that date until his death, his connection with McGill University was unbroken, and he devoted his energies unceasingly to the interests of the Faculty, and to the cause of engineering education in Canada. He held the William Scott Chair of Civil Engineering, and served as Dean of the Faculty for six years prior to his death. In 1929 Dalhousie University conferred on him the Honorary Degree of Doctor of Laws in recognition of his distinction as an engineer and a leader in educational work.

Such, briefly, is the record of his academic career. His other numerous activities will be recorded in their proper place. The purpose of this appreciation is to recall something of the man himself, and of those traits of character which were so well known to all who enjoyed the rich experience of intimate friendship with him. His unobtrusiveness and his modesty seemed, at times, almost to conceal the strength of will and determination which he displayed



HENRY MARTYN MACKAY

"Modest to a degree, wisely firm and eminently fair in his decisions, thoroughly equipped in his own field, a loyal colleague, an efficient administrator, he was an ideal leader of his Faculty."—*Sir Arthur Currie.*

in the discharge of his duties. He never wasted words, and he minded his own business. He had the rare faculty of getting at the heart of any matter under discussion, discarding irrelevancies with unerring judgment, and reaching sound and wise decisions in the many difficult problems which he had to face. Ever ready to show respect and tolerance for the views of others, he would state his own views with firmness and precision, and "an interview with the Dean" was a thing to be remembered by students whom he judged to be in need of advice. But he bore no malice, and hated all sham and pretext. For these reasons, and in recognition of his firmness and keen sense of justice, he earned the goodwill and affection of the whole student body.

Qualities such as these made him an ideal dean. He was also a painstaking and inspiring teacher, and many graduates in civil engineering will recall with delight the gentleness with which he could administer a rebuke. They will remember him as he stood behind the lecture table, chalk in hand, explaining with great thoroughness, and in his characteristically deliberate manner, the method of determining the nature of the stresses in the members of a bridge truss, as sketched on the blackboard. On one such memorable occasion the following dialogue ensued:

Professor (*speaking very slowly, with vowel sounds strengthened*): "And now, Mr. Harris, perhaps *you* will tell us the nature of the stress in the member HK?"

Mr. H. (*brightly*): "Well, sir, I should think it would be tension."

Professor (*even more slowly, with longer vowel sounds than before, and with deeper tone of voice*): "Tension. That would be *most* extr'-ordinary."

He was a charming host, and few knew better than he the art of giving a cordial greeting and creating an atmosphere of good fellowship. Many of those who are left to carry on will remember the informal dinners or luncheons at his club, when he gathered together a few of his colleagues, and others interested in the affairs of the Faculty, to discuss some new project, or a matter of administration presenting special difficulty. His geniality, his tact, his ability to appreciate all viewpoints, and that keen sense of humour which never forsook him, were combined on such occasions to find a way out, no matter how divergent the opinions expressed might appear to be.

He was of a most retiring disposition, and loathed flattery or fulsome eulogy. To extend unduly this effort to pay some little tribute to one who deserves so much would be contrary to his own desires. Let it be said only, in concluding, that it is given to few men to earn and retain, as he did, through a long career, the affection and loyalty of all with whom they come in contact. He worked hard and gave himself unstintingly to the task in hand, no matter how irksome it might be. He was never satisfied with half measures. He was a truly busy man. But he knew how to relax, and how to find in the enjoyment of simple pleasures, in his love for good books and music, in the ties of friendship, and in his home life, that relief from the harassing cares of office, which renewed his strength and enabled him to carry on. Stevenson, in one of his essays, describes the sad state of the man who is so engrossed in the affairs of the counting-house, or of his profession, that he cannot lie idly on the bank of a stream, smoking his pipe and throwing pebbles into the water, the reason being that his nature is not generous enough. MacKay could do all these things. His was a generous nature, and that is why he was so beloved.

The Beauharnois Power Canal

By Rielle Thomson

THE St. Lawrence basin is the one place in the world where low cost, almost unlimited water power energy is available at, or close to, seaboard. With the increasing use of power in industry and with the development of the electro-chemical and electro-metallurgical industries, the years to come must witness a development which will place this area amongst the leading industrial sections of the world.

The flow of the St. Lawrence varies less than that of any other river in the world. Canada has 4,000,000 horsepower available between Montreal and Prescott every day in the year, without the necessity of creating storage works. With the exception of those in Scandinavia, the rivers of Europe, Asia, Australia, and America have not the lake systems which allow either a natural or an artificial regulation of their flow, from which the most economic development of their power sites is possible.

In the Zambesi, Africa does hold power possibilities, but the power sites on that river are located in an undeveloped interior, far from those low cost shipping facilities which only the sea affords.

True, Scandinavia has power possibilities. A few of the power sites there may have a potential capacity as high as 100,000 horsepower; yet, once developed, the large user of power can not obtain further low cost power for future expansion.

The Aluminum Company of America chose the hinterlands of the Saguenay for erection of its plant, not because 200,000 horsepower was immediately available, but because a further 800,000 horsepower awaits development when required by the expansion of that industry.

And so, in the harnessing of the St. Lawrence at Beauharnois, the Dominion of Canada is witnessing only a preliminary step in a chain of developments which is bound in time to lead the country into a more prominent place in the World trade picture.

The St. Lawrence, up to Montreal, affords ocean going transportation. The Dominion has



THE BEAUHARNOIS POWER CANAL

This map indicates clearly the position of the new Beauharnois Canal and its relation to plans for the development of the St. Lawrence Waterways.

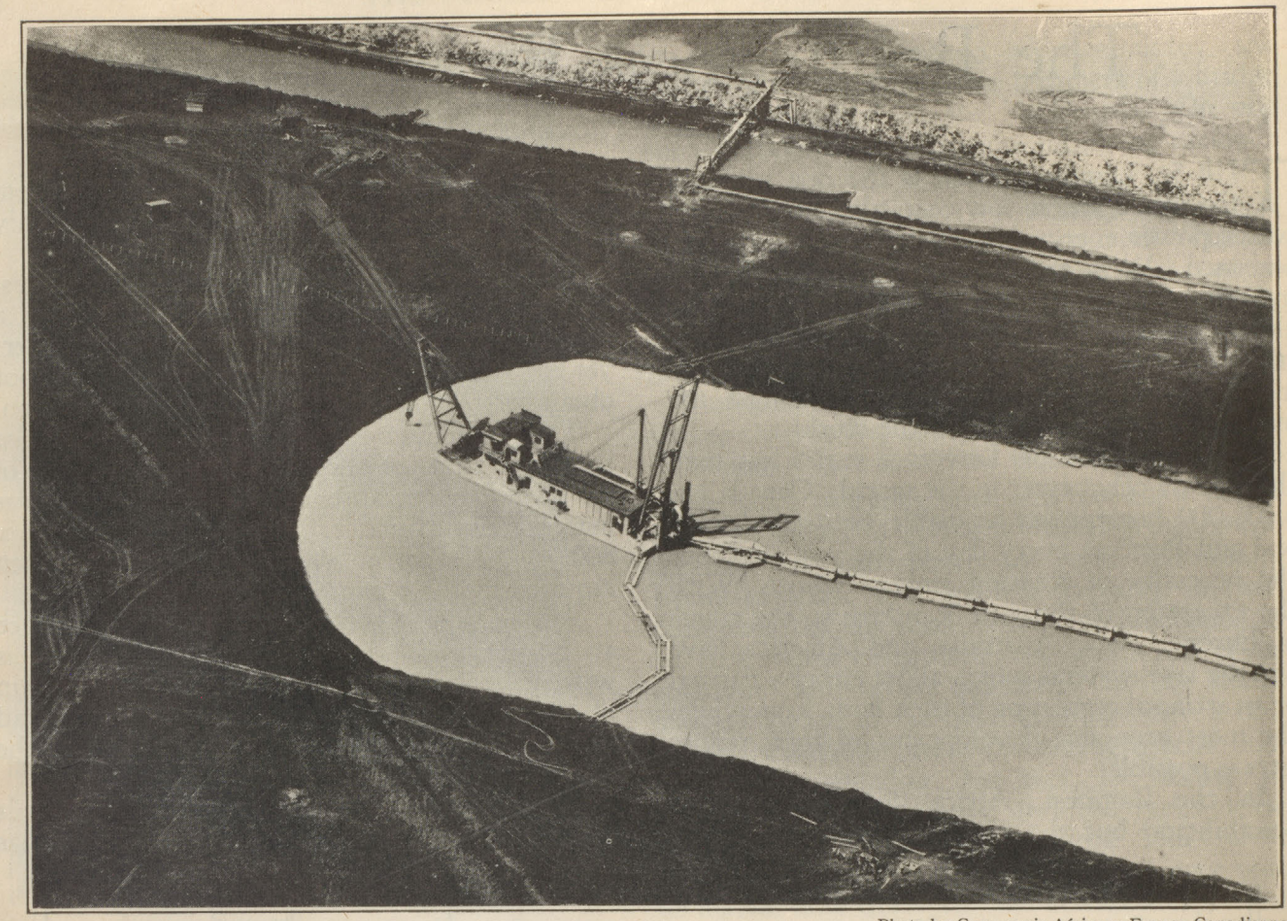


Photo by Compagnie Aérienne Franco-Canadienne

HYDRAULIC DREDGE DIGGING THE BEAUHARNOIS CANAL

This dredge moves forward as much as 200 feet in a day, and has excavated 800,000 cubic yards in a month. It is here seen cutting a channel 300 feet wide by 27 feet deep in the bed of the Canal.

many vital raw materials necessary for large scale, manufacturing industries; and the harnessing of the river assures power at a price that can compete, and indeed do better than compete, with prices anywhere else in the world. For instance, the Beauharnois conception, carried through to its ultimate capacity, would harness the whole river and produce 2,000,000 horsepower at a relatively low capital cost. Such construction cost would permit power sales at prices to compete with any region in the world.

Another aspect of the Beauharnois undertaking, which makes for wide public interest in the project, is its relationship to the deep water development of the St. Lawrence River. The new Beauharnois canal will provide deep water navigation in all the wholly-Canadian section of the river, save for the short stretch around the Lachine Rapids at Montreal. Deep water traffic will move from the Atlantic into Lake Ontario and Lake Erie as soon as the development of the International Rapids and the Lachine sections is completed.

In providing a deep water channel for ocean going ships in its fifteen mile canal, Beauharnois reduces by $16,000,000 the cost of providing the deep water navigation facilities in the St. Lawrence.

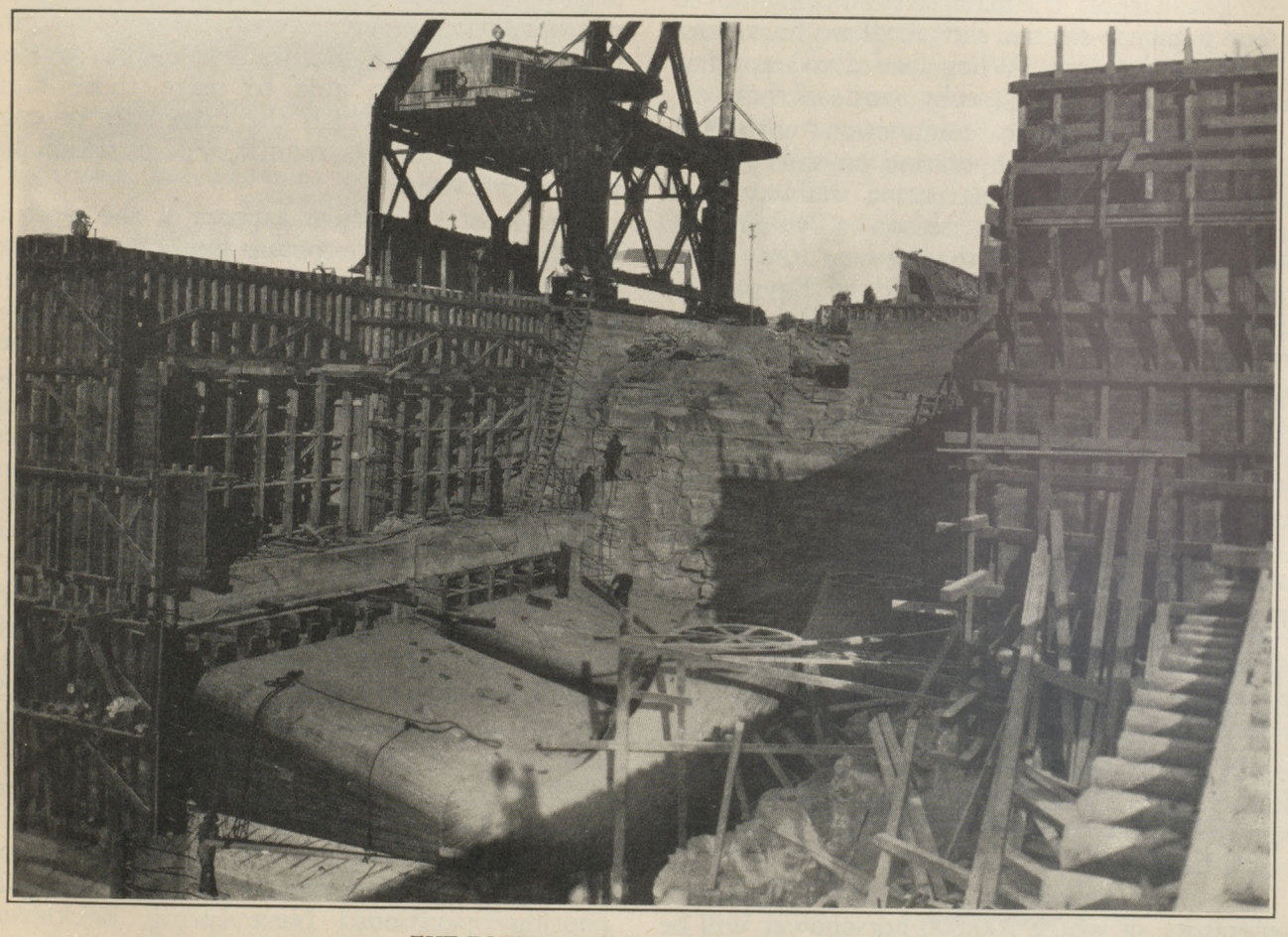
In the last fifteen years, industrial methods have changed. That change has not been as great, though, as the change in construction methods. Before the War, the Beauharnois development could hardly have been economically undertaken. Machines which could have handled the material on an economic basis had not been designed. Now the 500,000 horsepower development is being completed at a capital cost of under $130 a horsepower—a figure to compete with almost every other undeveloped water power site in the world. Moreover, should the development be carried through to its ultimate 2,000,000 horsepower conception, the capital cost per horsepower would decline substantially, as much of the work necessary to divert the entire flow of the river will be completed in the initial 500,000 horsepower installation.

Save for the tremendous volume of material to be handled, and the manner in which it is handled, the engineering features of Beauharnois are simple and easy of accomplishment. The development embraces a diversion of a quarter of the flow of the St. Lawrence by an overland canal around the four rapids which comprise the Soulanges section of the river. The canal runs to the south of the river. Water is taken from Lake St. Francis and carried at that level down to the shores of Lake St. Louis, where is located in a single stage development the 500,000 horse-power plant.

In brief, the canal construction calls for the erection of two dykes, over half a mile apart, leading from Lake St. Francis down to Lake St. Louis. At the western end of the canal, Lake St. Francis is now prevented from flooding the surrounding country by dykes. On the removal of these dykes, the water will flow to Beauharnois, where the power plant is being erected. The country slopes almost imperceptibly between Lake St. Francis and the shores of Lake St. Louis. The contours of the ground are such that there is only a decline of 15 feet between the head of the canal and the escarpment on the banks of Lake St. Louis, where the remaining 68 feet of drop in this section occurs. The contours of the land thus simplify the engineering features of the scheme.

The two canal dykes are half a mile apart, as ultimately, if further water rights be granted, the whole river may be diverted through the new watercourse and so produce 2,000,000 horse-power at Beauharnois.

Towards the north bank of the canal there is now being excavated a channel, which, ultimately, will be 600 feet wide by 27 feet deep. After the government instals the two necessary ship locks at Beauharnois, this channel will allow ocean going vessels to move up and down the canal. These two locks compare with five locks in the Soulanges Canal, which is now used by ships in this stretch of the St. Lawrence. Throughout the length of the Beauharnois Canal, rock cutting is required only at the power house and tail race sites. Here, the rock provides suitable foundations for the power plant. The excavation



THE POWER HOUSE AT BEAUHARNOIS

The illustration shows some of the concrete forms, also draft tubes for two 8,000 h.p. auxiliary units in the plant. The 50,000 h.p. units will have draft tubes six times the size of those shown.

required in the canal to provide a ship channel is entirely in marine clay, except for a stretch of a mile and a half, where boulders are encountered in the clay.

In essence, the enterprise consists of embanking the route of the canal to permit the water to flow from Lake St. Francis down to Lake St. Louis. Virtually the only excavation required is to provide the ship channel in the canal. In the short boulder clay stretch, the excavation is being carried out by two 5-cubic-yard electric shovels. The rest of the excavation work is being carried out entirely by an hydraulic, electric dredge. This dredge sucks away twenty-four hours a day at the marine clay, and pours out 1,100 cubic yards an hour. Recently, the dredge exceeded its rated capacity; its 2,200 horsepower motor gouged out well over 800,000 cubic yards of material in one month—a figure much in excess of its rated capacity.

The embanking along the canal route is being carried out by a battery of four electric, moveable, steel tower excavators, which move ten cubic yards of earth in each bucketful.

At Beauharnois, the material is all being moved by one immense electric shovel. Two bucketsful will fill a dump car. When loaded to capacity, the bucket bites out 9¼ cubic yards of rock.

This equipment, in conjunction with 135 pieces of rolling stock operating on thirty miles of standard gauge construction railway, has moved during the past season a volume of material much greater than twice the cubic contents of the Great Pyramid of Egypt. In addition, there is a fleet of a dozen smaller gasoline dragline shovels, which are carrying out supplementary features of the work.

The total cost of the equipment used for construction purposes only has exceeded $4,000,000. This figure, though, includes the cost of camps, a hospital, concrete mixing plant, fuel oil tank, and the one hundred and one other items which make up the equipment necessary on a job employing 2,300 men.

The plant itself will be in operation by October, 1932. The construction work could have been completed sooner, but at greater cost. The three years' construction period permitted an economic balance between interest charges during construction and the high cost of equipment necessary to carry out the job on an economic basis.

The plant will house ten 50,000 horsepower generators, of which 200,000 horsepower will be installed initially. For the initial installation, 26,000,000 cubic yards of material must be moved. To date, mid-October, 1930, some 9,000,000 cubic yards have been moved. The construction work provides as much indirect, as direct, employment. Orders already placed for power plant equipment and for power plant material run to $5,500,000. These orders alone must this winter provide indirect employment for 3,000 men, in addition to the 2,300 actually engaged on construction work.

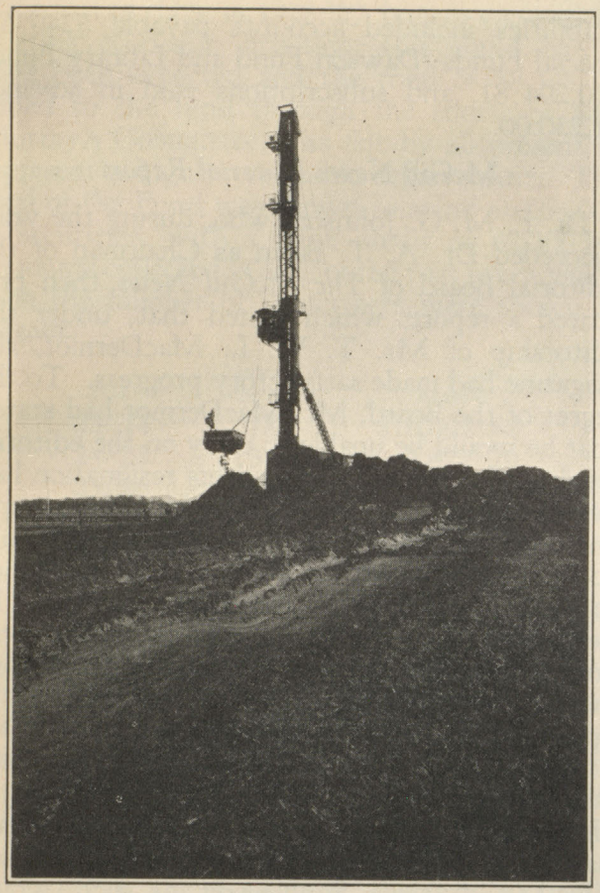
This autumn, the equipment on the job reached its maximum efficiency and handled as much as 60,000 cubic yards a day. Such a volume of material would fill a gravel train about 14 miles in length; it is the equivalent of the cubic contents of a ten-storey office building occupying a site 120 feet square.

In the construction work, it has been possible to affect savings which could not have been accomplished had the work been undertaken by a government body and contracts placed for the work. In the first place, excavating costs to date have been decidedly lower than the estimates. For instance, the electric hydraulic dredge—the equipment which will be used to carry out most of the excavation—has been operating at about one-third of the estimated cost. Also, by carrying out the work itself, the Beauharnois Power Corporation has been able to make those rapid changes in plans which the exigencies of engineering work always require. All of which has produced savings.

The most spectacular aspects of the work at Beauharnois are at the power house and tail race site, where 850,000 cubic yards of rock are being excavated. Here there is a construction camp—one of six others—where 500 men are housed and fed daily. Here, too, are located a forge for making rock drills, a completely equipped hospital, a 20,000 barrel oil tank, filled from tankers moving directly to the dock at Beauharnois, and a rock crushing and cement mixing plant, with a capacity of 100 cubic yards of concrete every hour.

The rock excavation for the power house and tail race has reached the required depth at the eastern end of the site, where the concrete foundations of the plant are being poured. The excavating equipment is moving toward the western end of the site, excavating as it goes.

This excavating equipment is being followed by travelling derricks, pouring concrete. This winter, the steel workers erecting the framework of the plant will follow in the path of the concrete-pouring operations. Next spring, bricklayers, working on the superstructure, will tread on the heels of the steelworkers. Next summer, all four



CONSTRUCTION OF EMBANKMENTS
Four moveable steel towers, 135 feet high, are operating day and night on the embankment work of the Beauharnois Canal. Each bucket-load equals approximately 10 cubic yards.

operations will be taking place simultaneously along the thousand foot length of the power house.

In addition to the completion of the power house, other work to take place next year includes the excavation of the tail race and the erection of a coffer dam, to prevent the river from flowing back into the draft tubes of the power house.

In all, thirty miles of dyking are required to bank both sides of the 15-mile power and navigation canal. This year 26 miles of dyking have been erected. Further work is required to bring the dykes to their final dimensions.

Over ten miles of subsidiary dyking has also been completed to provide large settling basins for the electric hydraulic dredge. These settling basins lie along the outside banks of the canal.

Construction work of all types on the canal and power house is ahead of schedule. Operations are steadily maintained, day and night, to make the greatest use of the expensive equipment which has been assembled to handle the job on a mass production basis.

On the thirty miles of construction railway are operated sixteen fuel oil locomotives, 105 dump cars, and other equipment, such as ballast spreaders, derricks, and a track shifter. One section of the road handles as many as 80 trains daily. The railroad is used in banking certain sections of the canal, to move the rock from the power house excavation, to handle the concrete from the mixer to the foundations of the plant, and to dump the excavated rock along the inner banks of the canal. It will cost in all about $65,000,000 to build the new power and navigation canal and to erect and equip the power house.

Annual Meeting of the Graduates' Society

THE Annual Meeting of the Council of the Graduates' Society was held in the Arts Building at 8.15 o'clock on the evening of Tuesday, October 14, 1930. Mr. George S. Currie presided, and there were present approximately 40 other members of the Society.

After the minutes of the semi-annual meeting, held on May 13, 1930, had been read by the Executive Secretary, Mr. Gordon B. Glassco, and approved, reports from a number of committees were read and adopted.

Membership Report

Mr. O. S. Tyndale, Honorary Secretary, stated in his report that membership figures, as on September 30, 1930, were as follows:

Life Members	166
Ordinary Members	2880
Total	3046

Mr. Tyndale's report showed that the 3046 total given above included 186 members of the Alumnae Society who are McGill graduates; also 633 members who, at the time the report was made, were in arrears for dues. The total, on the other hand, did not include 292 new members, who joined from the graduating class of 1930.

Financial Report

In presenting the financial report for the year and the audited balance sheet as at September 30,



PROFESSOR T. W. L. MACDERMOT
Whose resignation as Editor of *The McGill News* was recently presented to the Editorial Board and accepted with deep regret.

1930, Mr. D. H. Macfarlane stated that revenue had exceeded expenditure by $758.88, revenue having been derived and expenditures made as follows:

Revenue

Interest	$1,085.94
Subscriptions	5,161.65
Montreal Branch	529.60
McGill News	2,344.25
Football Programmes	907.00
	$10,028.44

Expenditure

Printing, Postage, Stationery, etc	$1,199.60
Salaries	6,444.42
Alumnae Society	218.55
McGill News	544.05
Interest	530.79
Depreciation	291.18
Bank charges	43.97
	$9,272.56

With the inclusion of the very satisfactory figures given above, liquid assets were shown to stand at $2,567.07, investments at $16,848.45 (market value), and fixtures at $2,620.66, net. Liabilities included accounts payable $249.65, Special Funds (Dawson Fund and Library Fund) $10,294.81, and subscriptions paid in advance $1,230.00.

McGill News *Editorial Report*

Dr. F. M. G. Johnson, who, during the year, succeeded Dr. A. T. Bazin as Chairman of the Editorial Board of *The McGill News*, then presented a report, which stated that, under the editorship of Mr. T. W. L. MacDermot, the magazine had made satisfactory progress. To the regret of the Board, Mr. MacDermot had stated that he would be unable to carry on the editorial work in the coming year and his resignation had been accepted, the Board, in making the acceptance, having passed a warm resolution of thanks to Mr. MacDermot for all he had accomplished in the magazine's behalf during the years that he held office. In order that the value of his experience might not be lost, the Board had recommended to the Council of the Society that he be appointed to a place on its personnel.

Continuing, Dr. Johnson stated that Mr. R. C. Fetherstonhaugh, Associate Editor, in charge of the News Section for the past year, had been appointed Editor for the coming year. *The McGill News Supplement*, as such, would not appear in future issues, but it was hoped that the new editor would eventually be able to present material of the type, and equal in quality to, that Mr. MacDermot had been so successful in obtaining in the past.

From a financial point of view, Dr. Johnson's report showed that the operations of the *News* had not been unsatisfactory. An average of 4,740 copies of each issue had been printed, and the majority of these distributed. Gross receipts from advertising had equalled $8,595.00, and 65% of this, or $5,586.75, had been credited to *The McGill News*, the remaining 35% being credited to the Graduates' Society, whose Executive Secretary placed all advertising and was responsible for the $405.00 increase in advertising revenue. Publication costs of the 4 numbers of the *News* had totalled $6,159.75, leaving a deficit substantially lower than authorized and, despite more illustrations in the News Section, lower than the deficit of the previous year.

Endowment Fund

One of the most important matters to come before the meeting was the report of the Endowment Fund Committee, under the Chairmanship of Mr. A. P. Murray. Mr. Murray expressed regret that collections in the current year were

not equal to those in 1928-'29, but, in view of the existing economic situation, this could hardly have been expected and the total of $8,348.34, added to the fund through the efforts of Mr. Murray's Committee, was felt by all present to represent a highly creditable achievement. The total of the Fund was shown to stand at $64,000 in securities, with a bank credit of $2,300.96. Amounts collected in each of the past seven years, with the number of subscribers, were shown as follows:

Year	Number of Subscribers	Amount
'23-'24	784	$10,891.82
'24-'25	317	4,877.29
'25-'26	456	4,554.27
'26-'27	254	3,606.43
'27-'28	677	9,737.58
'28-'29	711	10,847.50
'29-'30	618	8,348.34

In presenting his report, Mr. Murray read a letter from Sir Arthur Currie, stating that he had chosen Professor W. G. S. Adams, Gladstone Professor of Political Science, Oxford University, to deliver the first series of lectures under the McGill Graduates' Lectureships arrangement, and asking for approval of this choice by the members of the Graduates' Society Council. In adopting Mr. Murray's report, the meeting recommended that the Board of Trustees of the Endowment Fund should confirm the Principal's choice. On the motion of Mr. H. M. Jaquays, a vote of thanks to the Endowment Fund Committee for their faithful work, and for the highly satisfactory results therefrom, was passed unanimously.

Students' Council and Athletics

Reports were then presented by Mr. G. McL. Pitts and by Messrs. J. C. Kemp, J. A. de Lalanne, and W. C. Nicholson with regard to the activities of the Society's representatives on the Advisory Board of the Students' Council and the Athletic Board. The representatives in both these instances had been able to attend meetings of the Boards to which they were delegated, and to help these Boards in the solution of problems brought before them, and in the carrying out of their routine duties.

Board of Governors

In the absence of the representatives of the Society on the Board of Governors, Mr. G. B. Glassco read the representatives' report. This included a number of interesting items, among them the following list of resignations and appointments, with effect during the past year:

Resignations

DR. F. C. HARRISON,
Dean of the Faculty of Graduate Studies and Professor of Bacteriology.

DR. J. A. NICHOLSON,
Registrar of the University.

DR. D. A. MURRAY,
Professor of Mathematics and Chairman of the Department.

DR. A. McTAGGART,
Associate Professor of Agronomy.

Appointments

DR. F. C. HARRISON,
Emeritus Professor of Bacteriology.

DR. D. A. MURRAY,
Emeritus Professor of Mathematics.

DR. W. CALDWELL,
Emeritus Professor of Moral Philosophy.

DOUGLAS CLARKE,
Dean of the Faculty of Music.

C. W. HENDEL,
Macdonald Professor of Moral Philosophy.

N. B. MACLEAN,
Professor of Mathematics and Joint Chairman of the Department.

C. T. SULLIVAN,
Joint Chairman of the Department of Mathematics.

KIANG KANG-HU,
Professor of Chinese Studies.

T. H. MATTHEWS,
Registrar of the University.

A. G. D. PORTEOUS,
Associate Professor of Moral Philosophy.

C. L. HUSKINS,
Associate Professor of Genetics.

J. E. GILL,
Assistant Professor of Geology.

J. W. SCOTT,
Assistant Professor of Bio-Chemistry.

C. F. H. ALLEN,
Assistant Professor of Chemistry.

P. H. H. GRAY,
Assistant Professor of Bacteriology at Macdonald College.

J. H. MENNIE,
Assistant Professor of Chemistry.

O. N. BROWN,
Assistant Professor of Mining Engineering.

F. F. OSBORNE,
Assistant Professor of Geology.

WYNN EDWARDS,
Assistant Professor of Zoology.

After listing the past year's more important resignations and appointments, also the promotions to members of the University Staff, the



H. M. JAQUAYS

Newly-elected President, Graduates' Society of McGill University. Mr. Jaquays was formerly President of the Montreal Branch.

report of the representatives to the Board of Governors stated that approval had been given to the idea of selling the McGill Union and Strathcona Hall, and concentrating activities in a combined Students' Union and Gymnasium in Macdonald Park. The carrying out of this plan, however, must remain in abeyance pending the securing of adequate funds. Other plans with regard to University expansion had also received much thought and consideration, but these, too, could not be brought to completion until further financing had been arranged.

Election of Officers

The results of elections for officers of the Society and Representative Fellows on the University Corporation were then announced as follows:

President (to serve 2 years)—
H. M. JAQUAYS, Sci. '96.

1st Vice-President (to serve 2 years)—
J. T. HACKETT, Law '09.

Representative on the Board of Governors (to serve 3 years)—
P. F. SISE, Sci. '01.

Executive Committee (to serve 2 years)—
J. G. NOTMAN, Sci. '22
G. McL. PITTS, Sci. '09.

Council (to serve 2 years)—
W. W. COLPITTS, Sci. '01, LL.D. '21,
LOUISA M. FAIR, Arts, '24,
G. G. GALE, Sci. '05,
J. G. GLASSCO, Com. '25,
G. S. MACCARTHY, Med. '94.

Representative Fellows on the Corporation—
Arts—J. W. JEAKINS, B.A. '13.
Applied Science—R. J. DURLEY, B.Sc. '98.
Dentistry—H. R. CLEVELAND, D.D.S., '15.
Music—DOROTHY ARMSTRONG, Mus.B. '16.

Mr. G. S. Currie, the retiring President, then introduced the new President, Mr. H. M. Jaquays, who took the chair. A vote of thanks to the retiring officers was then passed; arrangements were made for the inclusion as members of the Society, upon payment of $1.00 additional annual fee, of all members of the Macdonald College Agricultural Alumni Association; Messrs. G. C. McDonald, J. W. Jeakins, and J. C. Kemp were elected to the Nominating Committee; and Messrs. Clarkson, McDonald, Currie and Co. were appointed auditors for the coming year. Reports from District of Bedford, Ottawa Valley, Quebec, and Toronto Branches were then presented by the representatives of these branches; and, there being no further business, the meeting adjourned.

The Montreal Branch

Following the annual meeting of the Council of the Graduates' Society on October 14th, the annual meeting of the Montreal Branch was held, with Mr. H. M. Jaquays presiding, and approximately 50 members taking part.

Mr. P. P. Hutchison, Honorary Treasurer, presented the financial report, which showed revenue of $813.00 net, after deduction of $1,626.00, being the share of membership fees payable to the Parent Society. Expenditure of $283.40 had been incurred in the routine activities of the Branch and a balance of $529.60, representing the excess of revenue over expenditure, had been transferred to the Parent Society, in consideration of office and secretarial services rendered.

Mr. J. T. Hackett, Honorary Secretary, then presented a report, outlining the activities of the past year, which included post-football-game

teas and dances in the Mount Royal Hotel; supervision of invitations for the Special Convocation at which General Smuts received an LL.D. degree; presentation of six Sunday afternoon lectures in Moyse Hall, in co-operation with the Department of Extra-Mural Relations; a Graduates' Smoker in the McGill Union, with a musical and boxing programme supplied by the student body, and with a comprehensive survey of the University's position by Sir Arthur Currie; a Graduates' Theatre Night, at the *Red and White Revue;* and co-operation in celebrating the Golden Jubilee of the McGill Union Debating Society.

After the adoption of Mr. Hackett's report, Dr. L. C. Montgomery presented nominations which resulted in election of the following officers:

President—
G. C. MACKINNON, Arts '00, Law '03 (term 2 years).

Hon. Treasurer—
FRASER B. GURD, Arts '04, Med. '06 (term 2 years.)

Executive Council—
S. D. PIERCE, Arts '22, Law '25, replacing DR. B. C. MACLEAN, resigned (term 1 year);
W. A. GRAFFTEY, Sci. '14;
GEORGE C. DRAPER, Sci. '14;
E. C. AMARON, Arts '23;
J. H. H. ROBERTSON, Arts '15, Law '20;
S. BOYD MILLEN, Arts '27, Law '30 (term 2 years).

Nominating Committee—
E. STEWART McDOUGALL, Arts '07, Law '13;
P. P. HUTCHISON, Arts '16, Law '21;
F. M. G. JOHNSON, Sci. '04, M.Sc. '05.

Following the installation of the new officers, a vote of thanks to the retiring officers was passed, and activities for the coming year were given consideration. A number of interesting proposals were made, and the meeting warmly recommended a continuance of the Graduates' Sunday lectures in Moyse Hall. The Smoker and Graduates' Theatre Night were also endorsed, and plans were advanced for the holding of these two celebrations. A general discussion followed, and the meeting, having dealt with all matters before it, then adjourned.

The District of Bedford Branch

The Reverend Ernest M. Taylor, Permanent Secretary-Treasurer of the District of Bedford McGill Graduates' Society prepared, recently a sketch of the history of this old branch of the Graduates' Society of McGill University. It was in March, 1898, that, in response to an invitation issued by the late Mr. Justice Lynch, a group of gentlemen met at the Court House in Sweetsburg, P.Q., and provisionally organized the branch society, with Judge Lynch as provisional president and vice-presidents appointed to represent the ridings of Shefford, Brome and Missisquoi. Eight months later, 24 graduates assembled in the Ottawa Hotel, Cowansville, and, after a banquet attended by Principal Peterson, Dean Walton, Dean Bovey, and other members of the University staff, formally established their branch society, with Mr. Justice Lynch as Honorary President, the Reverend E. M. Taylor as President, and a full slate of other gentlemen as officers.

In 1900, the Society met at Waterloo, P.Q., under the chairmanship of C. A. Nutting, Esq., and, some time later, established a scholarship at McGill for students from the Bedford District. According to Dean Moyse, who attended a meeting of the Society in 1911, this was the first



C. GORDON MACKINNON, K.C.

Newly-elected President, Montreal Branch, Graduates' Society of McGill University.

scholarship brought into being by a branch society at McGill.

Since the day, more than 40 years ago, when the Society was founded, meetings have been held not infrequently, and much of a valuable nature has been accomplished. Of the nine graduates who attended the meeting at which the first provisional appointment of officers was made, only two now survive. Younger men have taken office, for the most part, the list of officers for the present year, however, including the Reverend E. M. Taylor, who has served the Society from the beginning.

The Detroit Branch

Dr. Harold U. Mair, Secretary of the Detroit Alumni of McGill University, reports that Dr. D. Sclater Lewis, of the Faculty of Medicine and the staff of the Royal Victoria Hospital, Montreal, has accepted an invitation to be the guest of honour and principal speaker at a meeting of the Detroit Branch in December.

Dr. Mair also reports that Dr. Robert A. MacArthur, Arts '17, Med. '18, received in June the degree of Doctor of Medical Science from the University of Pennsylvania, following four years of research work and the preparation of a thesis on "Medical Diathermy in Urology." Dr. Harvey Dowling, Med. '25, is practising in diseases of the eyes, ears, nose and throat, in Detroit; Dr. Pearl Christie Dowling is specializing in paediatrics; and Dr. Frank Murray, Med. '25, is now Chief of the Department of Anaesthesia at Harper Hospital.

The Victoria Branch

Under the chairmanship of Ira Dilworth, Arts '15, the McGill Graduates' Society of Victoria, B.C., about sixty strong, gathered on the night of September 24th to dine in the Duke of Kent Salon of the Empress Hotel, and to welcome Sir Arthur Currie, Principal of the University; Mr. E. W. Beatty, the Chancellor; Sir Charles Gordon, of the Board of Governors; and Dr. W. W. Chipman, Emeritus Professor of Gynaecology and Obstetrics. With deep interest, the members of the Victoria Branch heard from the guests of developments at McGill, and of the guests' recent travels through what one speaker described as "the great new kingdom of the Peace River District." Tribute in the speeches was made to some of the men now working to maintain for McGill her old-time prestige; and warm appreciation was expressed by the guests for the Victoria Branch's abundant hospitality.

The Halifax Branch

Dr. R. A. H. Mackeen, Honorary Secretary of the Halifax Branch of the Graduates' Society, reports prospects for increasing membership in the current year, with corresponding increase in the Branch's activities and further strengthening of morale. Dr. W. L. Muir, Med. '07, has been elected President of the Halifax Medical Society and Dr. Victor Mader, Med. '23, is a member of the executive. Miss A. M. Mackeen, Arts '08, has assumed duties as Warden of Shirreff Hall, Dalhousie University, and associated with her is Miss Harris, M.S.P.E. '29, in charge of Physical Education.

The Toronto Branch

The McGill Society of Toronto held their annual stag dinner at the Royal York Hotel on October 11th, following the McGill-'Varsity football game. T. T. Irving, Sci. '98, presided, and the guest of honour was Dr. Fred Tees, Med. '05, who reported on the activities of the University. W. S. Ewens and G. C. Wainright represented the Society at ceremonies during the 'Varsity reunion in the week of November 3rd, and H. C. Davies represented McGill at the dinner of the Engineering Alumni Association held in the Royal York Hotel on November 8th. The Society suffered a serious loss recently through the death of G. A. McCarthy, Sci. '98, who died at his home in Toronto on November 13th. E. G. McCracken, Honorary Secretary of the Society, reports that the loss was one which all members of the Society most deeply deplore.

The New York Branch

Members of the New York Graduates' Society of McGill University, established in 1895, dined on November 14th in the Canadian Club, Hotel Biltmore, and were addressed by H. R. Dowswell, Sci. '09, on "The Empire State Building," the tallest skyscraper in the world, in the architectural design of which Mr. Dowswell was associated. The dinner also served as the annual meeting of the Society, which elected the following officers for the coming year: President, E. J. MacIver, Arts '93; 1st Vice-President, Dr. Frank Miller, Vet. '87; 2nd Vice-President, C. W. Ryan, Sci. '16; Treasurer, J. L. Roy, Sci. '12; Secretary, N. T. Binks, Sci. '16, 416 East 28th St., Brooklyn, N.Y. The following Governors of the Society were also elected: H. R. Dowswell, Sci. '09; Roy Seely, Sci. '09; Dr. V. C. Bailey, Med. '09; W. MacNaughton; Fred M. Becket, Sci. '95; and W. H. Luddington.

Founder's Day, October 6, 1930

(Sir Arthur Currie's Address)

WE are gathered here this afternoon not merely in our regular autumn Convocation for the conferring of degrees, but in celebration of Founder's Day. For generations it has been our custom to pause at this hour in memory of the man who made our university possible, in emphasis of the noble ideals which accentuated his gift. Founder's Day should be, and is, one of our most cherished institutions, for such a day is a day of memories, turning our minds backward to the splendid personalities, the sacrificing men of vision, who made possible our educational undertakings. It is a reminder of the glorious traditions and splendid heritage which came out of the past to soften and sweeten the lives of men. It should be a day of critical analysis, when in the light of these traditions we examine our work, take stock, as it were, of our own efforts, and decide whether or not we who remain are worthy and grateful trustees of our rich inheritance.

I shall not pause to stress the details of James McGill's life. Not many facts are available, nor does it matter much, for the worth and worthiness of a life depends more on its purpose and the manner in which that purpose has been fulfilled than upon its routine experiences, interesting as these may be. On the modest stone that stands in front of the Arts Building, you may read the brief and simple story of his service to the land of his adoption. But louder and more impressive than the inscription on that modest stone, speaks the visible and immortal monument to his career—the great university which so proudly bears his name across the years, and to which you have pledged allegiance. On this anniversary of his birth which we hold as sacred in our remembrance we must rededicate ourselves anew to the fulfilment of his dream. Life in our land has become more intense, perhaps, than it was in the time of those who laid the foundation of our Dominion and our university, but it can be faced triumphantly so long as we keep something of their faith. From the walls of our various college buildings look down the portraits of many of the men who helped to build surely upon the foundation laid by James McGill. Nothing has disturbed the calm of those serene faces—neither struggle, nor despondency, nor despair. Their eyes are afar, with the vision of a disciplined and enlightened youth, of a united and happy Canada, and their countenances are radiated with the light of faith and hope. Let us treasure jealously the splendid heritage their toil and sacrifice bequeathed to us so that the youth who go out from our Halls may bring to the world new life, new understanding.

And to those who go out today, to those whose names have just been added to our roll of graduates, I would say: You have enjoyed here superior privileges which it is your duty to impart to others. Stand four-square for the principles of conduct you have been taught; utter to your country the truths you have learned. Remember that it is the spirit of your nation and not its material progress that will conquer in the end, and that it is ideals that move the world. Keep your colours flying, and remember that the world is at the feet of him whom it cannot tempt. Remember, with Lowell, that there is unbounded strength in "one faith against a whole world's unbelief,—in one soul against the flesh of all mankind."

You go forth today into the sunlight of life with the great traditions of this place to maintain in your future careers. Be loyal to McGill's name

But today I want to address myself mainly to the freshman class, to those enrolled with us for the first time. I am disappointed there are not more of them here. As I came through the grounds, I noticed a great many engaged in football practice, and on the tennis grounds—possibly they feel they are more profitably engaged than they would be here listening to me. But I welcome the opportunity to say a word or two to those who are gathered today in this hall.

College students, as many of you realise at the time and all of you realise later, are the happiest mortals alive. That's what makes it a joy to talk to you and to live among you. Youth is yours, and freedom is yours—at least, more freedom than you have had at school, and more freedom perhaps than you will have again. Work is expected from you here—and I shall say something of that later—but you are free to work in your own way, you are free to choose your own career, you are free, in large measure, from the responsibilities that you cannot escape later; and in this blessed interval of leisure you are free to travel and explore in the world of thought. It is this travel "in the realms of gold" that makes you particularly enviable. You are embarked on the highest of adventures; almost any day of your lives here you may make, merely by keeping your eyes and minds open, the richest discoveries. Nor can you fail, if you do not clog your days with trivial things, to experience "hours of insight" into life's problems, and inspirations that will continue with you.

University is often spoken of as a preparation for life, and to be sure it is that. But then, other things are a preparation for life too, and it may be useful to ask what distinguishes university from these other preparations An apprentice to a carpenter, for example, is preparing for life, and it might seem that his case is not very different from that of a youth who comes to college to prepare to be a lawyer, a doctor, a teacher or something else. And, indeed, it must be admitted that in so far as the college student thinks only of his own career as doctor, lawyer, teacher, or whatever it may be, he does not differ one whit from the mechanic's apprentice. But what we try to do here, and what I sincerely hope you will find in your case and that of your college mates, is to make you think of something else than yourselves and your own careers. We want you to think of something for its own sake. We want you not merely to learn a knack as a carpenter does; we want you to examine the foundations and principles of things; to think for yourselves; not merely to learn to follow the method of a science, but to ask occasionally how such a method was ever devised. A few of you, in the days to come, may even devise better methods. But you will never accomplish that by thinking of yourself and your career, nor by preparing for life as the mere apprentice prepares for it.

We try our best, of course, to make you look at the foundations and underlying systems. We demand that you study other languages than your own, and other civilisations, the history of institutions and the history of science, mathematical relationships—these and other keys to thought we try to put into your hands. But we cannot do your thinking for you, nor can we take up for you your attitude to the methods and laws of Life and Nature. To a certain extent college is a "conducted tour," but only to a certain extent. If you learned by rote all that your professors said to you, you would not get on very well, and certainly the professors wouldn't think any the better of you for it. No, as we said at the

beginning, you are adventurers, explorers, discoverers; and you can be these only by keeping your own eyes and minds open.

There is another difference between university and most, if not all walks of life outside university—and that is this: Since we are dealing with the essential things we cannot afford, even from the point of view of saving time, to furnish you with object lessons or examples that are in any way second-rate. There was a time when only university students could read, and in those days there were few books. Nowadays books are produced by the ton, and we destroy whole forests to make printed matter. One could read thousands of these books and acres of these printed pages without a university education. But if you truly educate yourselves at a university you will find that the great bulk of these books and papers do not interest you; you will find that they can neither teach you anything nor add to your amusement. And so it will be with a good many things: with cheap music and cheap amusements of all kinds, with the slang phrases and inanities that make up the conversation of the street, with the baser notions of individual conduct, and vulgar notions of political life. Indeed, if you have not already acquired some higher view of human worth, you have quite missed your way in coming here at all. You cannot jazz your way through college. What we chiefly prize is intellectual achievement of some sort or other; and though not all of us do achieve and attain, we do demand of you intellectual endeavour, at least, we do want your imaginations and sympathies to be quickened, for your own sakes and for the sake of the community at large. Those of you who come here are very privileged members of the community; you can justify that privilege only by making some contribution to the community—in Science or Literature it may be, or perhaps in some less exalted way. But if you are to be the salt of the community you must keep your savour, you cannot be merely commonplace, nor content yourselves with the idols of the market-place.

I am not afraid to preach this high doctrine to you lest you become conceited. I believe that you have come to the best place in the world to get the conceit knocked out of you. You will laugh at one another; the professors will laugh at some of you; and perhaps you will think that you can laugh at some of the professors. Neither you nor any one else will be hurt by that. Laughing is good exercise, especially if a man learns to laugh at himself. You know, sometimes university authorities are told, or they read in the papers, that the present generation of university students is snobbish, or rebellious, or immoral, or some other terrible thing. For my part, I shall be loth to believe any such charges so long as there is evidence that you have not forgotten how to laugh. I know that some of you *will* write silly verses, and that some of you *will* make fools of yourselves on account of the fact that this institution is co-educational. But I warn you that your medicine is prepared for you, and I fancy that I can hear it gurgling already.

This much is general, perhaps, and might be said by the head of any Canadian university to the students of that university. But I want to add some very special words, which may also give point to some of the things I have said already, by reference to McGill University. We have no wish to plume ourselves too much, but in certain respects McGill is unique among Canadian colleges and universities. If you will read the charters of some of them (and, by the way, you can learn a good deal of Canadian history by giving attention to the history of Canadian colleges), you will find that some of them were endowed in order to train

preachers in various denominational sects; and again, as most of you know, a good many of them were established by provincial governments, sometimes with reference to the learned professions. All of these are, of course, laudable objects. But McGill, as its name recalls, was endowed by a private citizen of Montreal, and to an institution which had been formed for "the advancement of learning." The advancement of learning, mark you. Not in order to float clever men and women on a career, not to see that this profession or that profession was served, not for the narrow purpose of any sect, but for the advancement of learning! Besides its founder, McGill has had many benefactors, as you can easily learn by walking about the campus and enquiring the names of its many buildings; but not one of these benefactors has ever suggested a lesser or a narrower object than the advancement of learning. I keep repeating the phrase, and I hope it will ring in your hearts. If it does, then none of you will have too often to be reminded by your professors and others that what we chiefly prize in this institution is some form of intellectual achievement. If it does, then it will not be necessary continually to remind you that you can best requite your privilege in coming here by some contribution to the community, some capacity for leadership, some cutting edge or other which the community would not have found but for your efforts, some fineness or excellence illustrated by your life. These benefactors of McGill, many of whom had not the advantage of a university education, wanted to serve the community. They have, in a manner, called in your aid. They wanted learning to advance. It will advance, in your case, if you profit by your opportunities here. See that, through you, it advances beyond you, and after you!

Now, do I need to say much about work after that? Can you be content to be an idler or a procrastinator when the richest opportunities of life are yours for the taking? It is not only that libraries and laboratories are at hand, not only that trained minds are ready to assist you, it is that you can never retrieve the days of eager youth if you waste them now. I am not suggesting all work and no play, of course; I am not suggesting that you grow pedantic, and try to learn *everything* from books and professors, missing the rich experience of college friendships. But I do venture to remind you pointedly that October work has to be done in October, and November work to be done in November. I do venture to remind you that from your very first days in college, if you have not already done so, you should form habits of serious reading, or serious study of some kind. The world is not going to ask you, when you leave us, whether you went to Professor A.'s classes, or whether you have studied the things Professor B. recommended. The world is going to ask whether you are educated: whether, that is, you have learned to think; whether you have learned the lessons of history, and are now going to be able to take an intelligent interest in politics; whether you have been trained sufficiently in scientific methods to deal scientifically with a given problem; whether you can distinguish between sound and claptrap reasoning; whether your affection is for those things which are excellent, and honourable, and just, and true. That much, I take it, is implied in "the advancement of learning," and doubtless other things will occur to you as you go on. Such a harvest you cannot reap out of idleness. Choose your course wisely, seeking the advice of older friends. But having chosen, and having resolved to be diligent in that course, do not imagine that all learning lies in that province. Keep as many doors open in your mind as possible; cultivate your sympathies; and, besides your own good fortune, McGill and this country will have been fortunate in you.

The Latin Quarter

The Birthplace of Modern Culture and Learning

By J. Delisle Parker

TOWARDS the close of the Dark Ages, the Latin Quarter took a firm root on the south bank of the Seine as a great centre of learning. A magnetic charm has ever since clung both to the name and the place. For the student quarter of Paris, having firmly established itself on the slopes of the Mont Sacré, somewhat of a poetic exaggeration for a good sized hill, King Philippe Auguste surrounded it with high ramparts and bestowed on it special privileges.

The Latin Quarter thus became a state within a state, a condition unique in the history of scholarship. During the eight centuries of its existence as a University, the Quarter has more or less maintained this position. Even to the present day one feels on crossing the Pont St. Michel from the North that there is a different atmosphere from that prevailing in the rest of Paris. There is a mysterious mingling of the elements of youth, with its ambitions, dreams, ideals, arrogance, and nonchalance, and the absence of bustling trade or frivolous pleasure. The Quarter is still a state by itself.

To appreciate properly the evolution of this unique student quarter, it is necessary to go back to the days of the Roman Empire. The successors of Julius Caesar built in Lutetia, which is now Paris, a road, later called "La Rue St. Jacques." It is one of the famous roads of the world, for on each side, before it passes out of the ancient limits of the city on its way to Orleans and Rome, learning has thrived for generations.

Before retiring to the defence of the Motherland, the Romans considerably developed this Gallic settlement of Lutetia, dividing it, like all Gaul, into three parts. The big island of the Cité was to remain for a thousand years the main section of Paris, defended by high walls; and through its navigating interests to give to the town its coat of arms—a ship, and the words "Fluctuat Nec Mergitur." Constantly the town grew north and south of this island, where now loom the familiar outlines of Notre Dame at one end and the towers of the Conciergerie and St. Chapelle at the other. Rapid extension on the left bank by the Romans gave the Latin Quarter a start over the opposite bank, which has since developed into the great city of commerce and pleasure. There, southern Latins spread their villas, vineyards, and baths, such as remain in the Cluny Gardens, also many theatres and circuses, of which Les Arènes survive.

After the withdrawal of the Southern Latins, a Frankish invader, Clovis, in turn absorbed by the Gallo-Roman civilization, erected a building on the top of the Quarter's hill. Curiously enough, this became the first important educational building and, in a way, the foundation stone of the Latin Quarter, for, so legend relates, this barbarian ruler of Paris, before his departure to meet a fresh onslaught of invaders from the East, hurled his lance with great force, and, fulfilling a vow upon his victorious return, constructed an abbey whose length equalled his javelin's throw. The building was later dedicated to the patron saint of the City, Sainte Geneviève, whose ashes repose in the nearby church of St. Etienne du Mont.

About the year 1150, when the new Cathedral school of Notre Dame was overflowing into the quarter, a great teacher, Abelard, became involved in an educational quarrel with the Cité authorities. Incidentally, this is the same Abelard whose unfortunate amorous affair with Héloise has secured him a permanent place in the hearts of the romantic, and somewhat obscured his position in the history of scholarship. As the result of this dispute, Abelard, followed by a mass of pupils attracted by his enormous prestige as a professor, withdrew to the top of the mountain and established his famous school in the Abbey of Sainte Geneviève. Unhappily, the Tour Clovis, part of the Lycée Henri IV, immediately behind the Panthéon, is all that remains of a building so important in the early struggles of this mother of modern universities.

The Panthéon itself, with a great classic dome, now physically dominates the Latin Quarter and is, in a way, its Capitol. Built in the middle of the eighteenth century and originally dedicated as a church, in honour of the saintly lady whose Abbey had formerly stood so near, it is now the resting-place of France's great men, renowned in science, literature, or politics. Its unhappy architect, Soufflot, overwhelmed by his own audacity in erecting such a vast dome and dismayed by the opinion of friends and enemies that it would soon collapse, committed suicide. As it has stood for a century and a half, in vigil over a mass of schools, libraries, and churches nestling around it, one is tempted to recall that criticism is easy and art most difficult.

Notre Dame, having fostered the early school, thrust it forth to thrive, more or less under the church's maternal guidance, across the narrow Seine to the south bank, thus practically instituting the student quarter. Thereafter, in the nearby Rue du Fouarre, still existing in name, the uproar of the scholars at their recitations and disputes became a source of annoyance to the island dwellers around the cathedral. This Rue du Fouarre, named after the straw on which the hardy scholars of the period sat while following their masters' discourses, soon linked up with the Rue St. Jacques. Abbeys and schools increased along its slope until, from the river to the Abbey of Sainte Geneviève, the quarter assumed its distinctive character.

Seats of straw on the hard ground under a wintry sky indicate slight regard for material comfort, but a good deal of genuine interest in education, in the true sense, so admirably outlined by Professor Carleton W. Stanley in the June 1929 Supplement to *The McGill News*. Living conditions in those old days were trying. The wealthy student dwelt under his master's roof; the less well endowed sought a night's shelter, if driven from most humble of lodgings, under archways, in cloisters, or where Fate provided. Even the illustrious Dante, one among many of the immortals who studied in the Latin Quarter, was driven by poverty from his room in the Rue du Fouarre and forced to retire around the corner to the courtyard of the Church of St. Julien le Pauvre.

This little church is one of the most precious relics of the Quarter's history. First constructed in the sixth century, pillaged and partly destroyed by Norman pirates in their great attack on the Cité, long the meeting-place of the University Fathers, it still stands triumphant in that St. Séverin section so reminiscent of old Paris. Through the courtyard, well known to Dante Alighieri, battalions of tourists now troop to visit the famous dungeons running far below, one of the shows of Paris by night. The dungeons are genuine enough, however, and no

doubt many a mediaeval student received merited discipline in them, at the hands of the stern University authorities of the time.

Close to St. Julien looms up the far larger church of Saint Séverin, likewise ancient and full of venerable souvenirs. By its door has passed a long line of students with immortal names, such as St. Thomas Aquinas, Dante, Loyola, Bacon, Calvin, Erasmus, Rabelais, and Villon. A few steps beyond the Church, the signplate "Rue de la Parcheminerie" recalls a period long before the invention of printing. At that time parchment was costly; and conversation, not written matter, predominated. The art of argument flourished; and violent discussion was encouraged by professors to nourish the faculty of concentration, to induce greater flexibility of mind, and to develop a lively interest in scholarship. A large decoration in the courtyard of the Sorbonne recalls that there used to be an annual Fair of Parchment Makers, the occasion of a great spree, when the whole University, with music and much merriment to offset the dignity of the official cortege, marched over the wooded hill of Montmartre to St. Denis.

This mediaeval period in the history of the Paris University was one of romantic picturesqueness and of vast importance to modern education. The idea of a university, as we now know it, was slowly crystallizing. In the first instance, the renown of individual professors, such as Abelard, together with the protection bestowed on the Quarter by Church and State, acted as a compelling magnet to students from near and far. An international character was given early to student Paris. Civilization was struggling to its feet again, and its youth were thirsting for knowledge. The young scholar who nailed a shoe of his horse, according to custom, on the door of St. Séverin, as an ex voto for safe arrival, was necessarily something of a real enthusiast and not an educational dilettante. Many were compelled to travel on foot, or horseback, across mountain ranges, and through plains and forests infested with bands of cut-throats. This picture, and the fact that, upon arrival in the Latin Quarter, many students faced the prospect of considerable hardship, sometimes even starvation, in order to obtain some learning, irrespective of future rewards, make many of these mediaeval scholars objects of deep admiration.

Needless to say, among the four thousand young men in the Latin Quarter at the height of its fame in this early period were turbulent and disreputable spirits. Hence the dungeons in the courtyard of St. Julien. Perhaps in some cases the cries of the famished ones imploring the burghers for bread turned to violent action as dusk settled on the picturesque winding streets of half-gabled houses and cloistered churches. Then again, the scholars who frequented the taverns of the Rue de la Harpe, to the present day not entirely a street of the angels, or the famed Pomme de Pin on the Cité, could use in sudden quarrel the dagger or sword, proud prerogatives of the student, or could frighten a passing citizen into parting with his purse. François Villon, master of arts, father of some of the most divine verses in French literature, and a type of the wayward student of the fifteenth century, is credited with the writing of a perfect guide book to the obtaining by such means of a free meal.

The University authorities were from an early date given complete jurisdiction over their quarter. Even individual churches, such as that of St. Benoît, where lived Villon, with his "more than father," the venerable Guillaume de Villon, could exercise low and high justice for crimes ranging from petty larceny to

murder. Incidentally, this church, with its cloisters and courtyards, occupied the ground just below the present Sorbonne. While seated before its great door on the Rue St. Jacques one quiet summer evening, François Villon entered into a quarrel, stabbed mortally in self defence, and thus began an endless conflict with the Châtelet.

The Provost, or Chief of Police, had his headquarters at that time in the fortress prison of le Grand Châtelet, near the site of which now stands the Theatre of Sarah Bernhardt, and theoretically had no control over the Latin Quarter. Nevertheless, the Châtelet was frequently the scene of much drama for the iniquitous scholar, with the climax being a third act on the gallows of Montfaucon. Jealous of its rights, the University on certain occasions replied to action by the Châtelet in a positive and forcible manner, going to the extent, as in 1303 when a student was hung by the Provost, of closing down all classes. A century later, another Provost was compelled to cut down from the gallows a couple of students hanged for murder, kiss them on the mouth, and make a public speech of contrition before burying them. Years later, three sergeants of the watch promenaded through the Quarter in their nightshirts as a penance for rough-handling some teachers. The climax of these century-old feuds with the Châtelet occurred in 1452, when an exasperated Provost had the temerity to enter the Quartier Latin at the head of his men-at-arms and seize forty students. The Rector ordered the classes closed in protest, and the University was reopened only a year later, after the police had been duly punished by Parliament.

Two figures stand out prominently in the picture of those who toiled for the progress of the student Quarter. The first is that of Robert de Sorbon, chaplain to Saint Louis, who had the inspiration to found a college that included lecture halls and dormitories. The deplorable conditions in which many students lived led to this arrangement, which was developed greatly by the masters from the Latin Quarter who crossed the Channel and founded Cambridge and Oxford.

Sorbon's example was gradually followed, and, in Villon's student days, there were about eighty colleges, large and small, including the Collège des Ecossais and the Collège des Irlandais, the latter still existing. The Collège d'Harcourt survives in the Lycée Saint Louis on the Boulevard St. Michel, with the famous student Taverne d'Harcourt commemorating the name. The Collège de Navarre, the scene of one of Villon's noctural looting parties, is now the military school of the Ecole Polytechnique. Only a stone's throw from the Panthéon, the Polytechnique was the scene of the youthful military education of Maréchal Joffre and many of the most scientific soldiers of the French Army in the Great War. The uniforms of its cadets still lend a gay note of colour to the streets of the Quarter.

The other great constructive figure in the Quarter's history is that of Cardinal Richelieu. When on May 1st, 1625, he laid the foundation stone of the new Sorbonne, that was to replace and vastly increase the original Collège of Robert de Sorbon, an event of vital importance to learning took place. Richelieu, with an extraordinary foresight and grasp of his nation's affairs that extended to the wilds of Canada, linked by this act the mediaeval past of the University with a future that is still evolving. The Sorbonne thereafter became the citadel of learning, a place of examinations, laboratories, lectures, and great meetings. Although the buildings erected by Richelieu were replaced some forty years ago, with the

exception of the Church with its beautiful tomb of the Cardinal, the new Sorbonne plays the same rôle as the old. No longer, however, do students dwell within its walls according to Robert de Sorbon's intentions.

It was thus that the greatest of University quarters lost that particular phase of student life so prominent in Oxford and Cambridge. The main individual colleges being gradually amalgamated, or disappearing entirely, the Quarter, from the time of the Renaissance, more and more assumed the character of groups of educational centres, surrounded by well-built houses, occupied by the prosperous bourgeois class and the students. The palace of Marie de Médicis, now the Senate, with large and superb gardens that have been thrown open to the public for centuries, provide a new note. A veritable garden of dreams was planted in a corner of the Quarter, a garden that was to be the scene of much romance, and the place of exercise, or quiet study, for generation after generation of students.

Some distance south of the Latin Quarter has sprung up since the Great War a strange and new Cité Universitaire. This university town consists at present of thirty Fondations, or houses, many of them very handsome. Following somewhat the mediaeval idea of the colleges, except that the teaching will be carried on in the buildings in the Quarter ten minutes' bus ride away, each of a number of nations has already erected, or is erecting, a dormitory for its students. The Canadian House is among those with charm and comfort. With their libraries, meeting rooms, dining halls, and clean individual rooms at a low price, the New Cité is trying to combat the higher cost of living in the Quarter, and to develop in the mixed student body a better understanding and esprit de corps. Built in a row along an avenue that was until recently part of the old fortifications that encircled Paris, there is a certain crudity and lack of character about the neighbourhood. This rawness, no doubt, will disappear when the work on this dormitory appendix to the Latin Quarter has been completed.

With the celebration during the past year of the centenary of Romanticism, one comes to that phase of life known as "Bohemianism" and so generally implied when the Latin Quarter is mentioned. Some of the younger, cynical realists who frequent the lamentably stupid group of popular cafés along a few hundred yards of the Boulevard Montparnasse will probably doubt that the spirit of Bohemianism ever existed. The difference, nevertheless, between the present night life on Montparnasse, actually outside the Quarter, and that on the Boulevard St. Michel of a few years ago, is considerable. A thoroughly mixed, cosmopolitan crowd of young and old, wishing to see "Bohemian Paris," have made the Montparnasse cafés as famous as the Folies Bergère and the Moulin Rouge. In this artificial atmosphere of jostling crowds, high-priced drinks, and dazzling lights, many of the present students unfortunately mingle, and imagine they are being unconventional.

The historic "Boul' Mich' " runs parallel to the Rue St. Jacques and the Rue de la Montagne Sainte Geneviève from the Luxembourg Gardens to the river. On, or near, it are located many of the taverns or cafés so famous in the story of the Romantic period. The Café D'Harcourt, La Source, Soufflet, Taverne du Palais, Taverne du Panthéon (now the flourishing Capoulade), and the Closerie des Lilas, opposite the Bal Bullier, are all alive with memories of the students, artists, and famous literary Bohemians of the past. For over a century art students,

famous painters and sculptors, writers of all descriptions, and legions of unattached free lances have linked up with the University students in making the Quarter famous as a centre of thought and study in the midst of everlasting youth.

Up to a few years before Vimy Ridge, the Quarter was the centre for famous art schools such as Julien's and the Ecole des Beaux Arts, still existing in a diluted form. The art student and struggling artists of those days furnished a colourful subject. Their fantastic costumes, joyous irresponsibility, and wit made the Boulevard St. Michel a unique sight. Du Maurier with "Trilby," excellent in its illustrations and in characterization built largely from personal acquaintance, and the more fantastic "Scènes de la Vie de Bohême" of Murger are classics of this romantic period. Both books were written by men who had lived in the Quarter and knew their subject thoroughly.

This age of Bohemianism, out of which we have emerged with modern cares and standardization, was no doubt one of the reactions to the previous Revolutionary and Napoleonic periods. The Quarter itself had been the scene of much plotting and some bloodshed. Near the Ecole de Médicine is a district full of these Revolutionary memories. Near it is the house where Charlotte Corday stabbed Marat; and close by is the Eglise des Cordeliers, in which the conspirators met, and where was billeted the ragged battalion from Marseilles, who brought with them to the Capital their new and thrilling anthem which became in time the battle song of all France.

In the short space of a paper, it has been difficult to give more than an outline of the character and history of the Latin Quarter. The story of its early struggles, mediaeval triumphs and tribulations, and modern aspect has been only too briefly sketched. But the reader has probably observed how through all its transitions from the days of Abelard, the heritage of a mellowed past has been handed down through successive generations to throw a peculiar charm and fascination around the Quarter. Today, there are thirty thousand students of every race, enrolled in the University, exclusive of many thousands of artists and writers and the unattached in quest of knowledge. As eight centuries ago they came from far-off regions, so today, in ever-increasing numbers, the young intellectuals of the East and West flock to Paris and the Quartier Latin.

It is difficult to explain entirely this lure. Behind the picture of its great schools, churches, libraries, gardens, and streets full of a storied past, there is a charm almost impossible to define. Perhaps it lies in a sense of a certain freedom of thought, in the contemplation of joyous youth against a venerable and beautiful background, or in the atmosphere of intellectual aristocracy in the midst of a great city in the most mature of Latin countries. Even as far back as 1265, Pope Alexander IV wrote that "Paris remplit l'univers de la plénitude de sa science, répand la lumière de l'intelligence, chasse les ténèbres de l'ignorance, révèle au monde les secrets de la connaissance. C'est la cité renommée des lettres et des sciences, la première école de l'érudition." Later, in the sixteenth century, German student refugees called Paris "The City of Light," and thereby undoubtedly referred especially to the "moult vieux" Quartier Latin.

A Council Meeting in Prague

By Susan E. Vaughan

THE International Federation of University Women, an organization in which thirty-four countries are now represented, held its fifteenth Council Meeting in Prague from the 19th to the 24th of July last. For the benefit of those who are not familiar with the programme of the Federation, it may be explained that general conferences are held every third year, and meetings of the Council at the same time and also every intervening year. The last general conference was that held in Geneva in 1929; the next is to be in Edinburgh in 1932. The Council, having met in Prague in 1930, is scheduled to meet at Wellesley, Mass., in 1931.

The Prague meeting was, from many points of view, unusually interesting and successful. It was remarkably representative, there being present, besides the central executive, official delegates from no less than twenty-seven countries. One new national federation, that of Greece, was received.

A great part of the interest must undoubtedly be credited to the attractions of the meeting place, which were greatly enhanced by the hospitable efforts of the hostess Federation of Czecho-Slovakia. The venerable city of Prague has seen much water pass under its beautiful bridges, many scenes of violence and heroism in its streets, and in the great square of its ancient castle. Capital of the Kingdom of Bohemia, which was old when Shakespeare invented its sea-coast, centre of the long and desperate efforts to maintain its national character throughout the centuries of Austrian domination, Prague is now once more the proud capital of a European power and, to the young republic of Czecho-Slovakia, is not only the city of St. Wenceslasand John Huss, but of the patriot Masaryk, first President and, in a very real sense, father of his country.

Brief as was the time at their disposal, the visiting delegates were able to catch something of the blending of old and new which is the atmosphere of modern Prague—or Praha, to give the city its Czech name. The meetings were held, and some of the officers were lodged, in an up-to-date agricultural college, access to which from the centre of the city was by electric tramway. Shops, hotels, ranks of taxi cabs, dangerous crossings, hurrying crowds—these are the common property of all modern cities, Prague included—but the distinguishing features of Prague are not far to seek. It is a city of hills and of a winding river, crossed by many bridges, at least one of which is of great antiquity. On a commanding position on one of the hils stands the imposing architectural group—the enormous Hradcany Castle, severely simple in its long low outline, and the Cathedral of St. Vitus, elaborately Gothic. Lesser palaces, ancient churches, both Christian and Jewish, towers, monuments and statues were constantly waylaying the attention of the strangers, who, by the end of the week, began to feel quite on familiar terms with certain landmarks—such as the equestrian statue of Good King Wenceslas, and the ancient Powder Tower, which was found to be a convenient rendezvous.

The Canadian delegate reached Prague by way of London and Paris, in both of which cities it was an easy matter to slip into a Federation group at such attractive centres as Crosby Hall, Chelsea and Reid Hall, rue de Chevreuse. The

twenty-four hour journey from Paris was made in company with Madame Puech—well known to readers of the *News*, who was representing the French Federation and was also convener of the Committee on Intellectual Co-operation—and Madame Monod, one of the Vice-Presidents of the International. We arrived at Prague on the evening of July 17, and were met by the officers of the Czecho-Slovak Federation, who then and there began their programme of overwhelming kindness which was to last throughout our stay.

The minutes of the Council meeting, recently circulated, record the transactions of the 19th, 22nd, 23rd, and 24th of July. The 18th, 20th, and 21st, apparently blank, were really filled with engagements of great interest and importance, although, except for an occasional committee, these did not take place in the Council room. A detailed report of proceedings is neither possible nor desirable here; all that can be attempted is a brief mention of some of the outstanding features.

The problem of making delegates known to each other and attaching each to her own nationality was dealt with at the opening meeting when, as the name of each country was called, its representative stood and pronounced her own name as clearly as possible. So large was the attendance that it was found impossible to have each delegate read the report of her Federation, and the difficulty was met by the following resolution:—"That the National Associations, in addition to furnishing annual written reports, shall make brief oral reports at alternate Council Meetings, held between Conferences. The division of the Association into two groups shall be made by lot at the Fifteenth Council Meeting. Associations admitted between two Conferences shall always report orally at the next Triennial Conference, in addition to their written reports." The following were the countries drawn:—

1. Hungary	5. Austria	9. Rumania
2. Bulgaria	6. Jugoslavia	10. Sweden
3. Australia	7. Estonia	11. Belgium
4. Canada	8. Lithuania	12. Denmark

13. United States

Czecho-Slovakia as the hostess country was added to the list.

Though it may be noted that three of the reports indicated in this list would presumably be written in English, the variety of possible languages and the question of mutual intelligibility naturally arises here. It is answered by the regulation that English and French are the official languages of the Federation. Speakers use whichever they prefer, and translations from one to the other, or to a third language, are made if required. The fact that publications in languages unfamiliar to many Federations had been occasionally circulated led to the resolution that National Associations, whose language is not likely to be widely understood, be requested to include with any publications they circulate to other associations a summary in some language more widely known.

The reports of National Federations, interesting as these proved, elicited less discussion, naturally, than the reports of standing committees, of which two stand out as of major importance—that of the International Fellowships Award, under the convenorship of Dr. Smedley MacLean, and that of Intellectual Co-operation, under Madame Puech. Both of these committees produced evidence of long and laborious activity in the collection of material presented in their reports. Tangible results of their labours, which reach a much wider public than

that of the assembled Council, were shown in compilations prepared by Madame Puech, such as the lists of books sent in by the National Federations, and the printed list of International Fellowships, circulated free of charge to National Associations and sold at a shilling each to others. Both these important committees depend for their success on the active co-operation of all National Federations, and the appeals made by their convenors merit sympathetic and practical response. If letters and questionnaires are disregarded, no investigation, however carefully planned, can be fruitful, and, unless funds are forthcoming from the National Federations, no great scheme of International Fellowships can be carried out.

Space fails for more than mention of the reports of other important committees, such as that on Finance and that on Co-operation with other International Bodies. Dr. Cullis in her concluding address, after special mention of achievements which we have noted, continued: "The Committee for the Exchange of Information on Secondary Education must be congratulated on the new investigation which it had entrusted to Mlle. Arato. The Committee for the Interchange of Secondary School Teachers was rapidly paving the way to further exchanges; the Committee on Conditions of Affiliation and Co-operation had tackled several knotty problems with courage and wisdom; and the work of the newly-appointed, but very active, Travel Committee was assuming important proportions. The Federation had, in fact, shown the most amazing foresight and discrimination in the choice of its Convenors."

After congratulating the National Associations on the excellent and varied work which, as it appeared from their reports, they had achieved in their various countries, the President was supported by acclamation in expressing the Council's appreciation of the devoted work done by Miss Bosanquet and her staff, and the recognition of the fact that the personal distinction of the Secretary was an important factor in the successful work of the Federation.

Some idea of the efforts made by the Czecho-Slovak Federation for the success of the meeting and the entertainment of the delegates may be judged from the fact that the votes of thanks at the final meeting reached the number of twenty-seven. Some of those to whom indebtedness was thus acknowledged were President Masaryk and his daughter, a number of the Ministers of State, the Mayor of Prague, the Head of the Police, the President of the Spolescensky Club (a fine city club of which we were made visiting members), and the officers of all sections of the Czecho-Slovak Federation. Of our actual indebtedness to the persons mentioned in this imperfect list, a few significant details are typical. The City placed at our disposal the full time services of a polyglot policeman, who stood at the door of the College, not a mere guardian of its portals, but a most sympathetic being, ready to do anything for "the Madames," from tracing a missing trunk to translating a baffling paragraph. In our journeyings through the city, we had only to point to our badges in order to have all tram fares reduced by one-half. At the close of our first day's session, when we strolled through the streets with a group of our newly-made friends, we found some of the historic buildings illuminated in honour of our meeting. These attentions on the part of the municipality culminated in a most kindly and interesting reception, given by the Mayor and Mme. Baxa in the strikingly beautiful reception rooms lately built adjacent to the new Public Library. This handsome building is an example of the almost startling modernity that one meets in Prague, side by side with the

antiquity of its historic buildings, and not at all out of harmony with it. The Library is everything that a modern library should be, with improvements which even the latest American institution could not surpass. Incidentally, one's eye was caught in the children's room by the titles of such familiar friends as "David Copperfield," and the Ernest Seton Thompson and Charles G. D. Roberts animal books in the unfamiliar guise of the Czech language. The civic reception rooms, adjoining the library, were the most perfect examples which the writer has seen of new art principles of decoration, carried out consistently and beautifully in the woodwork, heating and lighting devices, furniture, and drapery.

Not only the municipal authorities, but the Government, showed every possible courtesy to the visitors. On Sunday, kept free of meetings, a most interesting all day excursion to the radium mines and Radium Institute at Jachymov was made possible by the co-operation of the Ministers of Health and of Public Works. A long motor drive across the beautifully cultivated country, with its golden wheat fields alternated by the deep green of hop gardens, and the gleaming white of ever-recurring flocks of geese; the sumptuous luncheon at the Radium Institute—a combination of Sanatorium and Hotel; the afternoon reception at Carlsbad in a delightful mountain park restaurant; all these made the Sunday holiday a very memorable one. Still more memorable was our last engagement—the garden party in the beautiful grounds of the Hradcany Castle, when we were entertained by President Masaryk and his daughter. There, while we sat under the trees drinking tea and chatting together, or exploring such interesting features as the lovely Italian "Belvedere," built by King Ferdinand in the 16th century, President Masaryk, in conversation with our President, Dr. Cullis, very quietly expressed his wish to further our aims by completing the fund necessary for the foundation of our first international fellowship. When it is explained that this meant a personal gift of one thousand pounds, some idea of our sense of gratitude to Czecho-Slovakia and its distinguished ruler may be imagined.

Generosity would seem to be characteristic of the country. We met it at every turn in the attentions of our hostesses. On registration, every delegate found herself provided with helpful maps and folders, a brief account, in French or English, of the history and geography of Czecho-Slovakia, and even a handsome pencil painted in the national colours. At the dinner given by the hostess Federation, every guest found by her plate a bead necklace, typical of one of the leading industries of the country, and—final triumph of attention to detail—each necklace harmonized in colour with the frock of its recipient. When finally we took our departure, members of the hostess committee were at the station with flowers for us.

If in this outline I have seemed to place more emphasis upon entertainment than upon sessions of the Council, I hope there is no danger of misunderstanding. Everyone who belongs to a working organization—and who does not?—knows that it is precisely those features of a meeting least conspicuous and colourful which constitute its most important parts. Meetings are always meetings, and they yield little material to the writer of impressions. Except for those rare souls in whom the constitutional sense is natural, attendance is frequently irksome and sometimes exhausting. Nevertheless, every active member of an international organization realizes that when she goes to a meeting to represent her national group, she cannot carry out her obligations by taking a sight-seeing tour, making

pleasant or instructive contacts with members from other countries, or even by making a brief speech at a dinner, or reading a national report. Beneath all this colour and charm, the roots of the whole flourishing plantation have to be carefully set and tended, and, if growth is to be healthy, no member can afford to neglect the fundamental tasks of study and cultivation.

Our Power House the Sun:
Its Past and Its Future

By Arthur S. Eve

This article by Dr. Eve is presented in the *News* through the courtesy of *The New York Times* in whose columns it first appeared

OUR sun is one of a great number of stars. All stars live on their capital; they "spend their substance" not in riotous living but in radiating energy. Bankruptcy awaits each in turn. All life on the earth is dependent on the continual outpouring of light and heat from the sun. When our power house is worn out or exhausted, then all life, including man's, must wholly disappear from the earth.

It is of interest to inquire how long our power house has lasted, how fast it is losing its supply, where the power comes from, and how distant the end. It is easy to measure the amount of heat which falls every second on a square foot of earth, at our distance of 93 million miles from the sun, at noon in the tropics. It is about thirty calories, or ninety-six foot-pounds, per square foot every second. Hence the whole output of the sun in all directions can at once be calculated, and the total loss to the sun evaluated.

The earth receives energy which, at 4 cents a kilowatt-hour, would cost the inhabitants 160-million-million dollars a day. This is merely the amount which falls on our speck of an earth, and the total outward flow in all directions of space vastly transcends that valuation.

Grading the Stars

From a close study of the spectra of the stars, using telescope and prism, it is possible to grade the stars, beginning with those in early youth and consisting mainly of gases, down into middle age like our sun, and onward into old age and decay. The older they are, the less they weigh, and the smaller they get. Hence it is possible to affirm with reasonable certainty that the radiation output is drawn from their material substance. Indeed, Einstein has given us a simple and exact relation between the energy of radiation and the energy of matter from which it is derived.

Hence, it is possible for Jeans and Eddington to make remarkable statements such as these: The sun is losing, as radiation, matter to the extent of 4,000,000 tons a second. Or, the amount of matter continually leaving the sun is 650 times

the weight of water flowing over Niagara Falls. Thus the atoms of the sun are disappearing and giving rise to heat and light, which are poured lavishly into space, never to return.

It must then be only a matter of time before this spendthrift effort comes to an end. Inevitably, too, there must have been some beginning, for no stars are infinitely immense; on the contrary, if too large, they may explode!

Estimate of Jeans

In the first place, Sir James Jeans calculates the age of the whole universe, that is, of all the nebulae and all the stars, at about 200-million-million years. If you were to multiply this by 100 he would perhaps raise no objection. But if you said with Arrhenius, the Swedish physicist, that the universe had existed from an infinite past, then Jeans would strenuously protest that the evidence is not supporting such a viewpoint, but quite the contrary. This estimate is based on two nebulae which contain each about as much substance as 2,000-million stars and radiate as much light as 500-million suns; a simple calculation shows that their expectation of life is about 100-million-million years, by which time the atoms would have expended their energy in radiation.

In his "Universe Around Us" Jeans states that about 2,000-million years is the age of our earth, a term which needs some explanation. Stars are scattered so thinly through space that they may be compared to five—and only five—specks of dust wandering at random in a great railway station. They seldom meet. Yet about 2,000-million years ago a star did come near to our sun, and by its attraction drew, from the sun toward the passing star, a long cigar-shaped mass of fiery matter, thickest in the middle, which then started swinging around the sun, and this flaming sword of atom condensed into the planets, into Mercury, Venus, Earth, asteroids, Mars, Jupiter, Saturn, Uranus, Neptune (and we shall now add Pluto), together with all their moons. These new-born planets began then to cool, so that perhaps 300-million years ago life was possible, and, in fact, somehow life did appear. Perhaps we may add that at a much later date man emerged, perhaps about 300,000 years ago.

When we look to the future we must remember that the sun has a known mass of weight of 2,000-million-million-million-million tons. It is losing 3-million tons a second; how long will it last and how long will it keep us warm?

Again, Jeans is ready with an answer. There is much more time to come than time that has passed. We are not yet midway in the earth's history.

The earth has existed for 2,000-million years since it left the sun, and man may hope to dwell on this earth for a million-million years to come; perhaps not always with the same ease and comfort of today.

There is a remote chance, however, that the future of the earth may not be so prolonged. Some stars, about our sun's age, go into a curious decline, and quietly shrink to a more compacted state. This has happened to a star which is the companion of the familiar dog-star, or Sirius. This "white-dwarf" is 19,000 times as dense as water, so that a cubic foot of it instead of weighing sixty-four pounds would weigh about 600 tons! And the light emitted has fallen off to one four-hundredths of that of our sun.

But Jeans assures us that our sun is unlikely to reduce its output by more than

3 per cent for the next 150,000-million years, even if it should get "stalled" by shrinkage to a small, heavy, white-dwarf star, and even that is improbable.

Estimate of Geologists

It will be thought, perhaps, that these modern estimates of astronomers are fanciful in type and excessive in quantity. In order to correct this impression let us hear the geologists, and turn to a letter by a Canadian geologist of eminence, A. P. Coleman. In brief, he contends that life existed on this planet more than 300-million years ago, indeed more like 1,200-million years ago. He declares that there were deposits of sand and lime and mud at such a distant period, so that there was certainly water on the face of the earth, and that the carbon and lime in these deposits are indicative of life.

Since these deposits were formed, there have been thrust through them from below dikes of igneous or volcanic rocks, the ages of which have been found with precision by two eminent workers, Walker in the United States and Ellsworth in Canada, working independently. These igneous dikes contain ores of the element uranium, which being radioactive breaks up at a determined rate, giving rise to a long chain of known descendants, every one radioactive, passing through radium to the last stable element of that series, namely, lead.

Work of Millions of Years

It is possible to take a uraninite crystal formed in the igneous matter after it pushed through the sand and mud, which are now compacted and transformed to the so-called Grenville series. It is next possible to analyze chemically the amount of uranium present and also the content of lead, and knowing, from the theory of radioactivity, the rate at which the uranium transforms into the lead, a simple division sum enables a marvellously good estimate to be made of the time when the igneous matter from below pushed up through the sedimentary beds. This time is at least 1,200-million years ago, so that Coleman declares either that the earth has never a very hot body outside, or that it left the sun as a white hot body much earlier than Jean's estimate of 2,000-million years ago. As the geologists were right with Kelvin, who offered them a beggarly 100-million years, and rashly refused more, so they may very well be again right.

Coleman adds that geologists can find no evidence that the outer part of the earth was ever molten, and he seems to prefer a growth of the earth from gradual accumulation of meteors, dust and fragments gradually compacting by mutual gravitation in an orbit around the sun. To this idea those groups of minor planets, known as asteroids, with orbits between those of Mars and Jupiter, suggest rather a disruption of a planet than the coming together of disjointed and separated masses.

Be that as it may, we are lost with astonishment at the fact that our planet has conserved a temperature somewhere between the freezing and the boiling point of water for at least 1,000-million years in the past, with a million-million years continuance in prospect.

There is one point to which sufficient attention has not been paid by the many eminent writers on this subject. It is generally admitted that the universe is running down, that energy is being dissipated and is becoming unavailable, so

that there is at last to be a dull, lifeless uniformity of desolate stagnation known as "heat-death." If this is admitted, we must yet remember that, so far as our knowledge of atoms goes, they perpetually contain an unimpaired vigour. There is no suggestion that an atom of gold or of oxygen ever gets tired or ever wears out. It is not certain, indeed, that the laws of thermodynamics, particularly the second, hold good in these inter-atomic regions where the electrons hold revel.

Electrons and Photons

It is, moreover, only suspected, not proved, that the energy of the sun, coming from the matter which it contains, is due to the collapse and annihilation of one positive electron with one negative electron, which, utterly disappearing as material and electrical entities, thereby give birth to a small shaft of light, projected into space with unknown destiny and destination, partly a wave, partly energy, whose curious conduct we attempt to describe with the word photon. So that we say an electron and a proton have died, and lo! a photon is born.

That indeed is probable, and the experimental verification, if ever made, will ring down the ages as one of the great achievements in the history of science.

To sum up, in a picturesque and forcible passage, Jeans compares the period during which the earth has existed as comparable to the height of Cleopatra's needle, man's period to the thickness of a coin, his civilized period to a postage stamp: "Now stick another stamp on top of the first to represent the next 5,000 years of civilization and keep sticking on postage stamps until you have a pile as high as Mont Blanc. Even now the pile forms an inadequate representation of the length of the future which, so far as astronomy can see, probably stretches before civilized humanity."

In the Dim Past

As to the conditions of the climate which are probable in this period, it is necessary to think and write with reserve. There is evidence not of one ice-age but of several, some of them far back in geological history. Then there are the perplexing facts of glaciation—ice action—in Central Africa, and of coal in the Arctic.

Probably the rhythmic advances and retreats of ice sheets are due not to one cause but to many. Our sun is a variable star; it may travel through regions rich or empty of meteoric matter; the heat trapped by the earth and retained by its atmosphere is dependent on the varying amounts of carbon dioxide, water vapor and volcanic dust. These and other causes sometimes pull asunder and sometimes together, so that we wonder the less at the variations of temperature; we marvel rather at the extraordinary uniformity which, prolonged through ages, enabled us to emerge and develop stage by stage from humbler origins.

Yet we may picture if we choose the last man of the last men, in spite of all his prevision and all his care, looking back on the long and honourable record of his illustrious race, passing contentedly to his death, with a far better conception of the scope and idea of the universe than the boldest of us has yet ventured to conceive.

Lord Moynihan Accepts an LL.D. Degree

SPEECH DELIVERED AT A SPECIAL CONVOCATION ON SEPTEMBER 18TH

"DR. MARTIN, my colleagues, ladies and gentlemen: My first word should not be one of gratification and willing acceptance of a very high honour, but should be one of apology. It is ten years since this university did me the most acceptable honour of offering me the degree which today has been conferred upon me. The honour has been well worth waiting for, for today it has been surrounded by every circumstance, not only of honour, but of personal delight to myself, for I have been presented for this degree by my friend, Dr. Archibald, one very eminent as a surgeon, inspiring as a colleague, loyal as a friend, a man to whom the greatest surgeon who ever lived, Lord Lister, would have rejoiced to have applied his favourite word, 'Trustworthy.'

"This is by no means my first visit to Montreal and to the hospitals here, and when here I realize a certain significance about the methods of conducting medical affairs which, I think, characterizes McGill in a higher degree perhaps than any other university, even among the many universities which Dr. Archibald has enumerated, with which I have the honour to be associated. Two things have always impressed me here. First, the spirit of teamwork—and I rejoice to use the phrase 'team work,' because it is one in its application to medicine for which I claim paternity, having introduced it, I think, into the literature of surgery more than 30 years ago—though when you look at me you will hardly credit that statement. (Laughter.) I think the chief of a faculty of this sort would like most properly to quote those famous words of Nelson in his despatch written after the battle of the Nile, 'I have the happiness to command a band of brothers.'

"Another feature of the University and of hospital life here, which impressed me, was the close association and the wide interest taken in all matters surrounding both education and the welfare of the sick by the lay people associated in that work, their devotion to the interests of education and to the interests of medicine, their lavish generosity, impressed me more than I can say.

"I have one regret today as compared with the possibility of my having received this degree some years ago, and it is, that a man whom I held in highest esteem and who honoured me with his friendship, Sir Vincent Meredith, is not here to applaud and to share my honour with me.

"A university is said to have many functions. I regard it as having one in particular, and that is the search for truth, not only through the humanities, but especially perhaps, so far as we are concerned here, through science. Science is the only non-partizan pursuit of truth, and a university, in my judgment, should be not only a sanctuary for the old thoughts but a laboratory for the creation of the new, and it is in the perpetuation of research within your laboratories here that I think you will find your highest satisfaction.

"One of your great intellectual ancestors, and one of my closest personal friends, Sir William Osler, made me realize what it was to have a living hunger

for knowledge and a zeal for truth, and when I came to Montreal to be honoured in a degree—which not only affords me the highest gratification, but is a degree which even you cannot excel in honouring your friends—I would like to think that the spirit of Sir William Osler is with me today, and giving me his benediction at the time I receive honour at the hands of a University which he loved, I truthfully believe, above every university in the world.

"It is therefore, Dr. Martin, with great feelings, not only of personal satisfaction and of pride, but a feeling that I am joining here today a community of old friends who have gone, as well as being admitted to a brotherhood of friends, whose friendship I count among the best things in my life, that I beg to thank you for the honour conferred upon me."

Book Reviews

IN a handsome volume of 106 pages, size 11½ x 8½ inches, produced by the University Press, Glasgow, Scotland, Mr. Christopher Hussey has presented, under the title TAIT MCKENZIE, A SCULPTOR OF YOUTH (Country Life: London: 25/), examples of the finest work of one of McGill's distinguished graduates.

The book is more than an album of Tait McKenzie's work, and something less than a complete biography; though the album is suggested by extensive illustration and skilled biography by the manner in which the examples of sculpture, together with the circumstances surrounding their execution, are explained. Tait McKenzie's sculptural work began, as most readers of this magazine are aware, in the late 1890's when, having graduated in Medicine some time previously, he was Director of Physical Education at McGill. Athletics and athletes were, naturally, the subjects to which his latent talent turned, and the famous "Sprinter," "Athlete," "Competitor," and many other works of a similar character, stand today secure in their place among the finest examples of athletic sculpture of our time. In the earliest experiments in work of this type, the sculptor, as Mr. Hussey explains, worked almost entirely to careful measurements, averaged from the limbs and torsos of the men with whom he came in contact at McGill. Later, as his touch become more deft, and his profound knowledge of anatomy more assured, he abandoned this metrical method and depended more and more, to produce his results, upon the keenness of his eye and upon that extra sense without which no artist, irrespective of his medium, ever reaches the pinnacle of his profession.

Tracing this development with rare understanding, and explaining it to those not acquainted with the intricacies of sculpture by adequate and illuminating illustration, Mr. Hussey follows Dr. McKenzie after he left McGill and, in a chapter on "Football," explains the exact meaning of "The Onslaught," a piece of work one-quarter life size, and the panels of the beautiful memorial to Percy D. Haughton, famous among the football coaches of the United States, which stands at Soldiers' Field, Harvard University. To the uninitiated observer, football, as played in Canada, or in the United States, is often a meaningless piling up of bodies, arms and legs. When viewing "The Onslaught," even the uninitiated would sense that all was not chaos, and, with the assistance of Mr. Hussey's text, could clearly discover what the massing of bodies was all about. The group

shows a line plunge through centre and, though based essentially on American football, is of deep interest to any lover of the Canadian game. Even the camera, with its speed and marvellously all-seeing eye, cannot even remotely rival in vivid portrayal of a critical moment in a game, this masterpiece of sculpture. One studies it for long minutes at a time, coming back to the illustrations of it over and over in the pages of Mr. Hussey's book, and always finding in it something to renew one's attraction.

Though Tait McKenzie has achieved lasting fame through his sculpture of athletes and athletics, it is probably through his work on memorials that his name will be most widely known, particularly those memorializing the men and national sentiments of the Great War. There is, in his war memorial work, something of the divine touch which, in another sphere of art, won for John McCrae a place among the poets of the Empire. Neither McCrae nor McKenzie stoops to gather cheap applause, yet each, perhaps through the reaction of similar emotions, touches the hearts of the simple people of the land, and commands the professional respect of the most learned.

McKenzie's Scottish-American War Memorial in Edinburgh is beautifully illustrated in this volume, as are the memorials to Lieut.-Col. G. H. Baker, M.P., standing in the lobby of the House of Commons, Ottawa, and "The Volunteer," the war memorial in Almonte, Ontario. One is tempted to refer to other memorials, and to still more of the scores of pieces of work illustrated in Mr. Hussey's pages, but must refrain. Unreservedly, however, it can be stated that the book would make an acceptable gift, though, if anyone should acquire it to give away, let him beware, for, when he studies its pages, the temptation to keep it will be severe.

Mr. Charles Yale Harrison, at present a newspaperman in New York, produced recently a volume, GENERALS DIE IN BED (Morrow: New York: $2.50), of some interest to Canadians through the fact that the author, according to the announcement of his publishers, enlisted in Montreal late in 1916, and was drafted to one of the most distinguished battalions of the Canadian Corps.

As many reviewers have pointed out, the title of the book is meaningless, being given, one must presume, to attract attention and, possibly, in the manner of an urchin thumbing his nose from some point of security, to express Mr. Harrison's dislike of those whom circumstances for so many months placed in positions, such that nose-thumbing of them by inferiors was, at least, inadvisable.

With regard to the early days of Mr. Harrison's military career, when he enlisted at the old Peel Street barracks in Montreal, the present reviewer can add little to the details of recreation in speak-easies, where, so Mr. Harrison implies, his comrades spent a fair proportion of their time. A few years ago, details such as those given would have been considered unfit for publication, but, inspired perhaps by the example of ALL QUIET ON THE WESTERN FRONT, writers of war books seem now to vie with one another in supplying what they must believe to be the public demand.

Having had the privilege of writing the official regimental history of the unit with which Mr. Harrison later served in France, the present reviewer approached

the part of the book covering the author's experiences at the front with the greatest interest. A battalion history is bound to differ from unofficial writings, and it was with ever-increasing interest that the reviewer found how great the divergence could be.

The official history, of course, quite consciously refrains from washing dirty linen in public, and equally from following into their personal relationships, officers, and other ranks, irrespective of how creditable or discreditable their private activities may be. This unofficial story adopts the opposite procedure, though all names used are expressly stated to be fictitious.

Perhaps no serious criticism could be levelled at this type of writing except on the grounds of taste, were it not for the fact that the publishers, through identification on the book's dust jacket of the author's unit, un-named in the text, cause reflection to be cast on the name of a fine battalion, and shame to be directed, though unsuccessfully, at the memory of its more than one thousand dead.

According to Mr. Harrison, the battalion in question slaughtered hundreds of unarmed and pitifully inoffensive Germans at Amiens, in revenge for the sinking of His Majesty's Canadian Hospital Ship *Llandovery Castle*, which, so the author tells us later in his story, was really a munitions ship in disguise. One wonders if the fact that portions of this book were first published in Germany explains the eagerness to present this time-worn story, supported by no stronger evidence than Mr. Harrison's memory of what was said to him by an unidentified transport orderly in Boulogne. One can well believe that the munitions ship story made more acceptable reading in Germany than the story of Canadian doctors and nurses—we who live in Canada know many of their names—killed, as Sir Andrew Macphail has written in his official *Medical Services*, with "utter savagery" by Submarine U86, under command of First-Lieutenant Helmut Patzig. "Even the escaping lifeboats," Sir Andrew adds, "were pursued and sunk."

Equally comforting to German susceptibilities, more particularly when coming voluntarily from a soldier who, whether Canadian or not, served in one of the proudest battalions of the Canadian Corps, are the details given of the slaughter at Amiens. To quote Mr. Harrison:

> "The figures run with funny jerky steps towards us, holding their hands high above their heads. We open fire as we advance . . . There are hundreds of them. They are unarmed . . . We continue to fire . . . The grey figures continue to fall, one by one, until only a handful is left. They realize they are doomed, and they scream . . . They are mostly youngsters . . . They throw themselves into the crater of a shell-hole. They cower there. Some of our men walk to the lip of the hole and shoot into the huddled mass of Germans. Clasped hands are held up from out of the funnel-shaped grave. The hands shake eloquently, asking for mercy. There is none. In a few seconds only a squirming mass is left. As I pass the hole, I see the lips of a few moving. I turn away."

After reading this extract from Mr. Harrison's book, curiosity compelled a consultation of the pages of the battalion history. Was there any recorded incident at Amiens, even remotely, resembling the scene Mr. Harrison claims to have observed? There was none corresponding in detail; but in the history the following paragraph appears:

" . . . Enfilade fire was opened on the German position, and soon a white flag indicated surrender. Forgetful of the known tactics of the Hun, a number of men advanced across the open to occupy the trench and accept the garrison's submission. These individuals paid the penalty of their trust, and were killed by treacherous rifle fire. Angered by their death [[their comrades]] resumed the attack, grimly ignored two white flags which suddenly appeared, and shot without hesitation a number of the enemy who stepped onto the parapet with hands in the air. Whether this 'surrender' was a further ruse, or whether the Germans, having exhausted the possibilities of treachery, expected to be treated as honourable prisoners of war, no one knows, as, in the fighting which followed, the garrison of the position was killed to a man."

This story, supported by ample evidence, would not be as popular in Germany as the story of the inoffensive Teutons slaughtered in well-nigh cold blood by the savages from across the sea, nor does it make as sensational reading. One can realize the temptation to which Mr. Harrison would seem to have succumbed; but it would, perhaps, be not unfair to wonder if, having written a book of this type, the author's satisfaction in his work is at all profound.

The publishers have forwarded, with a request for notice in our columns, a copy of MORAL SENSE (George Allen and Unwin, Limited: London: 12/6d.), by James Bonar, LL.D., being the latest addition to the "Library of Philosophy," started more than forty years ago.

The book is not a "popular" work in the now accepted sense of the term, its subject being the rise, progress, and decline of a theory of moral philosophy prevailing in Great Britain for the greater part of the eighteenth century. The book gives an account of the leaders of the theory, Shaftesbury and Hutcheson, and of their principal followers and critics. It is a book for the student of philosophy and, only in a very limited degree, for the general reader.

R.C.F.

Clovelly from the Sea

A silken veil of misty rain,
A sea that slept, and dreamed again

Of caravels, and galleons,
And men who sailed to fight the Dons.

White gulls swept round our vessel's side
With swoop, and veer, and cross, and glide;

While, still across the placid bay
There trailed the veil of silver-grey.

But, suddenly with brilliant light
The mist glowed in its upper height,

Then fell apart, and there, there lay
Revealed the cliffs around the bay,

Whose circling steeps of greenest jade,
Most finely carved, were all inlaid

With peridot and tourmaline;
But, loveliest spot in all that scene

Was where, adown a cleft of green,
Lay littered pearls of softest sheen:

They formed a jewel-pendant there
Of strange design, and very fair.

The vessel imperceptibly
Moved closer in, and gradually

Those pearls were changed to fishers' cots,
And in the place of peridots,

O'er hills above, in each ravine,
Were swards and banks of lightest green,

Whilst rosy cliffs stood, where had been
The markings of the tourmaline.

Oh! tiny village by the sea,
Clovelly, honoured, thou shalt be

Far, far above those cities vast,
Where power is worshipped first and last;

For greatness cometh not with wealth,
And Beauty only lives by stealth

Where Mammon thrives. Thy heritage
Is thine old self from that great age:

Elizabethan, still unchanged,
And all the beauties round thee ranged—

The cliffs, the sea. Thy wealth is sure,
If thou wilt but avoid the lure

Of change, and if thou still shalt be
For wearied souls, a sanctuary.

—R.R.T.

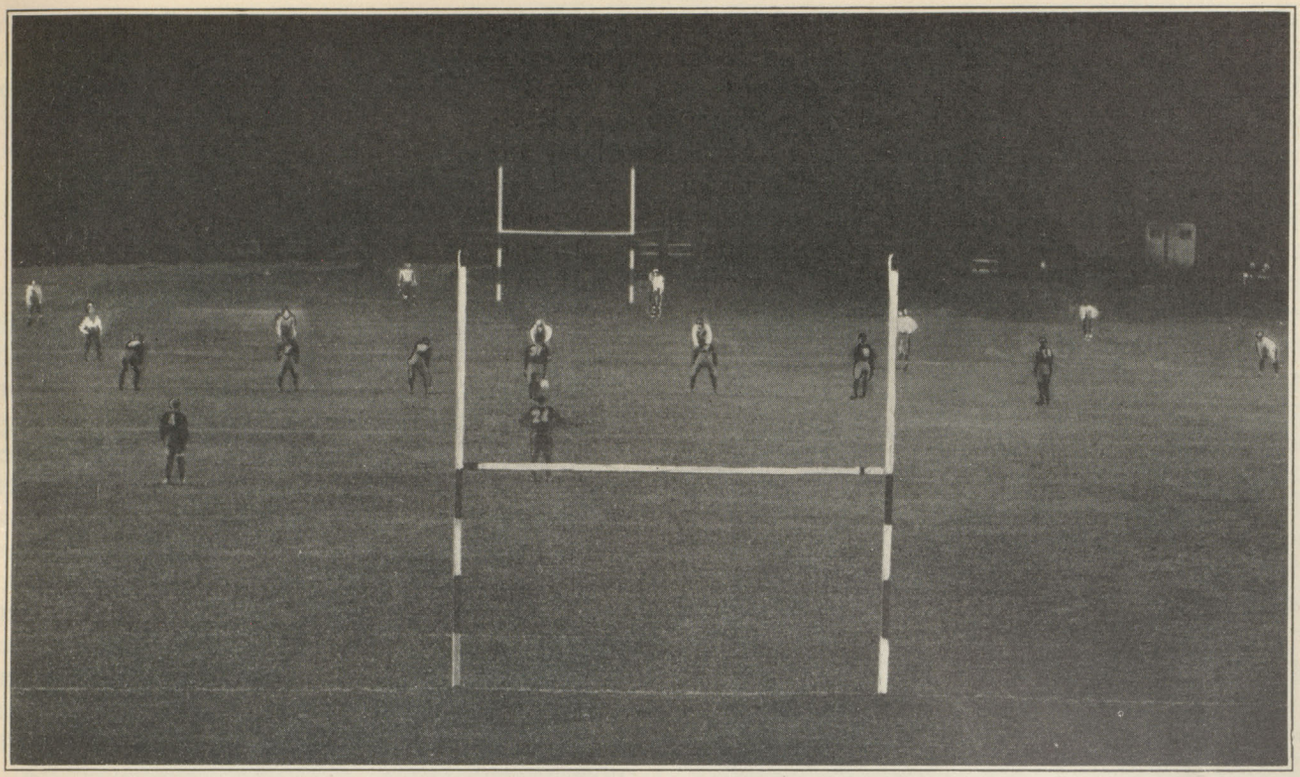


Photo by courtesy of *Montreal Star*

NIGHT FOOTBALL

This photograph, taken from the field house at the Percival Molson Memorial Stadium, shows the McGill and M.A.A.A. teams lining up on the night of October 1st in the first game of night football played in Eastern Canada.

McGill Wins Five Championships

Football

FOR the seventh time in nine years, Queen's University holds the senior championship in Canadian Intercollegiate Rugby. Probably no season in recent years witnessed a series of such closely contested games, with touchdowns almost a novelty and decisions brought about for the most part by superiority in punting, with consequent one-point scoring through rouges, or kicks to the dead line. The McGill team scored only one touchdown in six games and, though finishing in last place in the league standing, had only two touchdowns scored against them.

In the first exhibition game of the year, McGill clashed with Westward, the Dominion Intermediate champions, and eked out a victory by 2-1. This result was not impressive, but worse was to come, for on October 4, Royal Military College visited Montreal and, before 7,000 stupefied spectators, defeated McGill 19-13. Meanwhile, on October 1, in the first game of football played at night in eastern Canada, M.A.A.A. had visited the Percival Molson Stadium and defeated McGill 14-3.

To say that McGill in the pre-season exhibition games was disappointing is to make a statement with which few of those who sat dismally in the grandstands, or those who bore the colours of McGill on the field, will disagree. Nevertheless the team showed momentary flashes of high class work, and it was obvious to those who have watched the Intercollegiate teams for years that no McGill team in a decade had shown as good physical condition.

With the opening of the Intercollegiate season, McGill fielded a team which fought most creditably, but which was not able to defeat Queen's, 'Varsity or Western. Three times in a row McGill was beaten. No opponent crossed the Red-and-White goal-line for a touchdown; but superior kicking and defensives, at least equal to McGill's, gave Queen's, 'Varsity and Western a definite advantage. Scores were 6-0, 11-1 and 5-1, a feature of the 11-1 defeat administered by 'Varsity and the 6-0 defeat inflicted by Queen's lying in the fact that Sinclair of 'Varsity kicked all eleven points for his team, while Carter kicked all six for Queen's.

On November 1, 'Varsity, undefeated in the Intercollegiate up to this time, appeared on Molson Stadium and confidently prepared to hand McGill another substantial lacing. No one who witnessed the game will soon forget the shock that 'Varsity got in the first half when McGill, playing football of well-nigh championship calibre, ripped the blue line to pieces and, despite Toronto's far superior kicking, scored a converted touchdown and a rouge, leading at half-time by 7-1. 'Varsity tied the score in the second half and, though McGill again ripped through time after time for yards, the game ended at 7-all, with 'Varsity in possession on their own 5-yard line. It was McGill's game all the way, and the 11,000 spectators in the stands, caring little for the actual score, left for home satisfied that they had seen in action not one, but two teams, worthy to carry the colours of the great universities they represented.

Encouraged by the result in the 'Varsity game, McGill faced the University of Western Ontario confidently in Montreal on November 8, and won a tight game, featured by the play of the opposing lines, by a score of 4-1. Again, it was McGill's game all the way, the play for much more than half the time being well on the Western side of mid-field. In the 'Varsity game, McGill had placed only one substitute player on the field, but in this match, with its hard playing on the line, more frequent use of relief men was essential.

On the following Saturday, McGill faced Queen's in Kingston and lost a game, more spirited and more closely fought than the score would indicate, by 12-0. Western defeated 'Varsity in London on the same day, the results of the two games giving Queen's the championship by a clear margin.

English Rugby

For the fourth successive year, the McGill English Rugby team withstood the onslaught of the University of Toronto's team, and emerged from a home-and-home series of games with the Intercollegiate championship. The first game in Toronto ended with a score of 3-3, but in the return game, played on the old Campus on November 1, McGill showed superiority in all stages of the play and defeated 'Varsity 14-6. The English game is gaining in popularity in Canada, and the quality of the play is far above that of only a few years ago. No scratch team can be fielded now with even a remote hope of success.

At the end of the season in Montreal, the McGill team made a highly successful tour in the Maritime Provinces, defeating Mount Allison University 9-3 on November 8, and winning a close 5-3 game from the University of New Brunswick, in Fredericton, on November 10.

Soccer

In a game against 'Varsity on the New Playing Field on October 25, McGill clinched the Intercollegiate Soccer championship by a score of 3-1. Toronto scored first, but McGill evened before half time, and in the second half pressed through to a satisfactory win. The Soccer team has played some fine football this autumn, among their victories being a 2-1 game played on the Percival Molson Memorial Stadium on October 4, against a strong team from the United States Military Academy at West Point. The American cadets pressed hard in the second half to overcome McGill's 2-point lead. They scored once, from a scramble in front of the McGill goal, but their further courageous and determined efforts were unsuccessful.

Track and Field Sports

In the Intercollegiate Track and Field meet, held in Kingston on October 24, McGill swept to a clean-cut championship in impressive manner. No intercollegiate records were broken, or equalled, but McGill outclassed 'Varsity and Queen's to win 65 points, 'Varsity getting 46 and Queen's 15. Last year, Toronto won the title by a narrow margin, but this year McGill, with first places in the 120-yard high hurdles, the quarter mile, the half mile, the running broad jump, the discus throw, and the javelin throw, showed unquestionable superiority.

Rowing

Before a crowd of approximately 15,000 spectators, the University of Toronto's eight-oared crew defeated McGill by a length and a quarter in a 2-mile race rowed on the Lachine Canal on the afternoon of Saturday, October 4. It was Toronto's race all the way, and the win gives 'Varsity a 3-2 lead in the five annual boat races contested since 1926. The Lachine Canal provided an excellent scene for the race, and it is not improbable that more contests will be held there in the future.

Tennis

In a tournament, played on the McGill courts

(*Continued on page 66*)



DR. A. S. EVE
Whose appointment as Dean of the Faculty of Graduate Studies and Research was announced recently by the Governors of the University.



DR. F. M. G. JOHNSON
Newly-appointed Dean of the Science Group in the Arts and Science Faculty. Dr. Johnson is also Chairman of the Editorial Board of *The McGill News*.

University News and Notes

Arts Faculty Reorganized

Following a meeting of the corporation of the University held early in October, it was announced that the Faculty of Arts would be called in future the Faculty of Arts and Science, and reorganized in such a way as to bring the instructors and professors in scientific studies into one group, under a chairman, who will be called "Dean of the Science Group in the Faculty of Arts and Science." Dr. F. M. G. Johnson has been appointed to this position. There is, of course, no division or cleavage in the Faculty, which remains one, its dean being as before Dean Ira A. Mackay; but it is felt that the reorganization will mean more efficient co-ordinating of the departments of pure science—such as those of chemistry, physics, biology, and geology—and that, as a result, these scientific departments will be materially strengthened.

Dean A. S. Eve's Appointment

In mid-September the University announced the appointment, as Dean of the Faculty of Graduate Studies and Research, of Dr. A. S. Eve, Director of the Macdonald Physics Laboratories, head of the Physics Department, and President of the Royal Society of Canada. Simultaneously, it was announced that Dr. F. M. G. Johnson, Director of the Chemistry Department, had been appointed Vice-Chairman of the Faculty. Since that time, as mentioned elsewhere in these columns, Dr. Johnson, who, among many other duties, holds office as Chairman of the Editorial Board of the *News*, has accepted appointment as Dean of the Science Group in the reorganized Faculty of Arts and Science.

General Staff Officer to the Principal

On October 9th, Sir Arthur Currie announced that new and important duties had been assigned to Professor Carleton W. Stanley, who, as a result, becomes what Sir Arthur defines as "General Staff Officer to the Principal." Professor Stanley, who will continue to act as Professor of Greek, is a graduate of the University of Toronto, with experience in Oxford, where he obtained a "First in Greats." Returning from Oxford, he taught English Literature and Greek at Toronto University for three years, resigning to enter the textile manufacturing business, which he abandoned in 1925 to join the Department of Classics at McGill. He is the author of numerous articles in Canadian and foreign reviews upon classical subjects and Canadian affairs, and has been steadily associated for years with movements designed to raise academic standards and increase the dignity of the teaching profession.

Registration Figures

Registration figures issued by the University on October 29th show that, despite more severe matriculation requirements, the total of students attending McGill has increased to 2,555 against 2,528 last year, excluding the Faculty of Agriculture and the Faculty of Music, for which, figures were not at the time available. Registration in the Faculties, other than those of Agriculture and Music, were listed as follows: Faculty of Arts, 1,022; School of Commerce, 247; Faculty of Applied Science, 303; School of Architecture, 41; Faculty of Law, 93; Faculty of Medicine, 469; Department of Public Health, Faculty of Dentistry, 34; School of Physical

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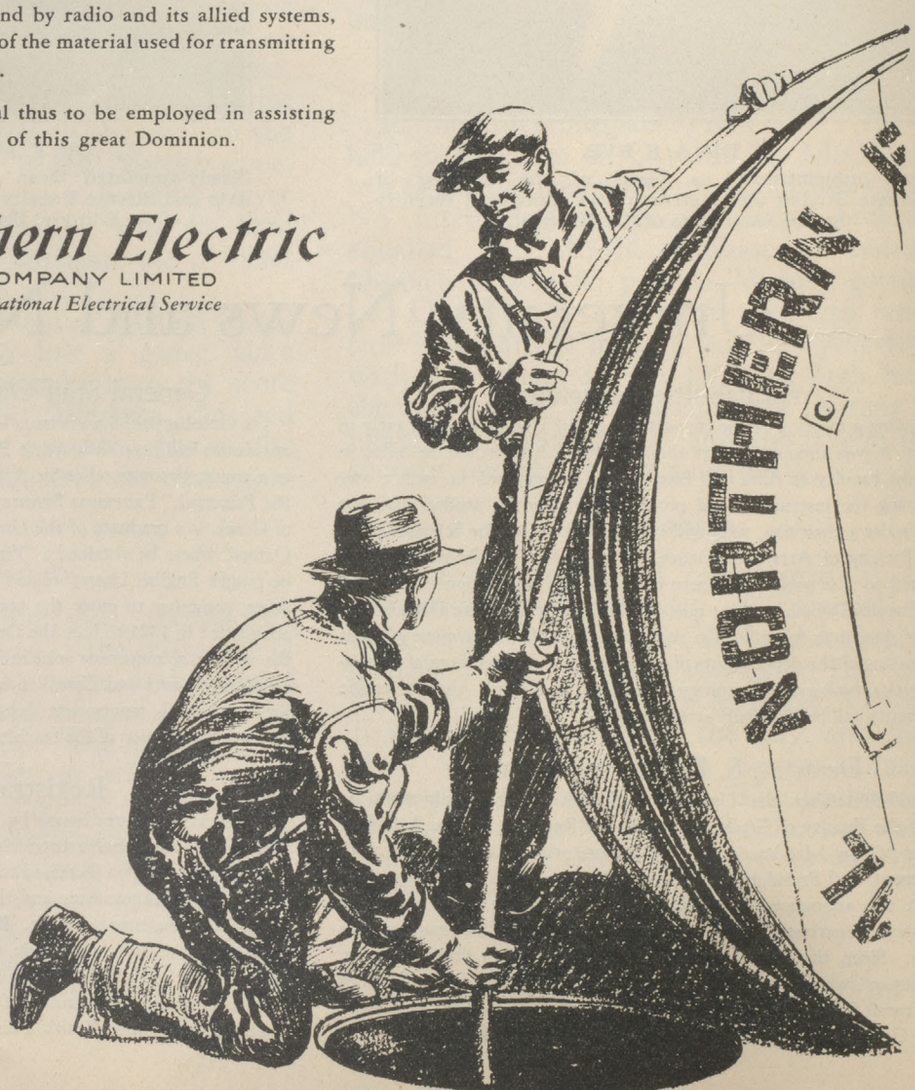
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Education, 42; School for Graduate Nurses, School for Social Workers, 27; Library School, Department of Pharmacy, 7; others 60; total, 2,555. Estimated total, including Agriculture and Music, 3,134.

Graduate Registration

Registration of students in the Faculty of Graduate Studies and Research is the largest in the University's history, according to an announcement made by DEAN A. S. EVE on October 28th. Some 220 students had registered by that date, approximately 37 doing final work for their doctor's degrees and the remainder working for master's degrees. A high proportion of students are working in the Department of Chemistry, the Graduate School in Chemistry being regarded as the most important in the Dominion.

Sir Arthur Goes to India

The Government of the Dominion has appointed SIR ARTHUR CURRIE to represent Canada at the inauguration of New Delhi as the capital of British India in February. SIR ARTHUR has accepted the appointment, and is proceeding to Delhi as the guest of the Indian Government this December. Editorial comment in the press of the Dominion agreed that, in the appointment of the Principal of McGill University and the former General Officer Commanding the Canadian Corps, the Dominion of Canada had secured representation which it would be difficult to excel.

Research in Insular Scelerosis

In November the University announced that, through the generosity of T. B. Macaulay, Esq., and members of the Board of the Sun Life Assurance Co. of Canada, DR. L. J. RHEA, Chief Pathologist of the Montreal General Hospital, would proceed to London, England, to study methods in use there of preparing material for use in the spinal disease known as "insular scelerosis." Discovery of an agent for the treatment of this disease was announced some time ago from the laboratories of SIR JAMES PURVIS STEWART, and DR. RHEA's studies will, it is confidently expected, mean that the highly scientific methods at present in use in London will be available, in due course, in Montreal.

Dr. Hamilton White's Appointment

In mid-November the Governors of the Royal Victoria Hospital accepted with deep regret the resignation, as Chief of the Department of Oto-Laryngology, of DR. H. S. BIRKETT, C.B., M.D., C.M., LL.D., former Dean of the Faculty of Medicine of McGill University and original Commanding Officer of the University's famous overseas medical unit, No. 3 Canadian General Hospital (McGill), B.E.F. Simultaneously, it was announced that DR. BIRKETT would be succeeded as Chief Oto-Laryngologist of the Royal Victoria Hospital by DR. E. HAMILTON WHITE, Arts '99, Med. '01, who, for many years has served on the staff and, since 1920, has held the post of Assistant Oto-Laryngologist. DR. WHITE is a member of the Royal Society of Medicine, London, England, a fellow of the American College of Surgeons, and a member of the American Academy of Ophthalmology and Oto-Laryngology.

McGill Exhibit in Buenos Aires

According to an announcement made early in November, McGill will be among the Canadian universities and colleges placing exhibits in the British Exhibition in Buenos Aires in 1931. The McGill display will include a painted panorama of the University, a series of mounted photographs, units from the library, information in Spanish from the Registrar's office, and pamphlets in Spanish giving prospective students, and all others interested, the details about McGill they would naturally desire.

The W. M. Birks Scholarship

W. M. BIRKS, Esq., a Governor of the University, has donated a prize to the Department of Classics, as a result of which a scholar from certain British public schools will be brought to McGill to take a 4-year course. The prize is valued at $500 a year, and the winner will be nominated by a committee of British headmasters.

Radio Research Appointments

The National Research Council has established an Associate Committee on Radio Research, under the chairmanship of DR. A. S. EVE, Dean of the Faculty of Graduate Studies and Research, McGill University. The Associate Committee, patterned after the boards at present functioning in Great Britain and Australia, will study the frequency standard problem, refraction over water, impediments to long distance transmission, the effect of the aurora on wave propagation, meteorological data, and other similar problems.

The Autumn Convocation

At the Autumn Convocation of the University held in Moyse Hall on October 6th, McGill conferred 26 degrees, including 4 degrees of M.Sc., 3 of M.A., one Ph.D., and one Doctorate of Music; also 6 diplomas. The Principal's Founder's Day Address, delivered at this Convocation, appears elsewhere in this number of the *News*.

Queen's Fall Convocation

At the annual fall convocation of Queen's University held in Kingston on October 24th, Dr. Hamilton Fyfe was installed as the Principal of Queen's, and an honorary LL.D. degree was conferred upon SIR ARTHUR CURRIE. The McGill Principal, who is an honorary graduate of some 16 universities, including Edinburgh, Cambridge, Princeton, Harvard and Toronto, welcomed Dr. Fyfe to Canada on behalf of McGill, referred to the outstanding services to Canada of Principal Grant, a former principal of Queen's, and prophesied that, under Dr. Fyfe, the famous university in Kingston would go forward to new activities and ever greater usefulness. In conclusion, SIR ARTHUR thanked Queen's University sincerely for the honour conferred upon him, and congratulated the University and the new Principal upon the association they had formed.

Professor of Bacteriology

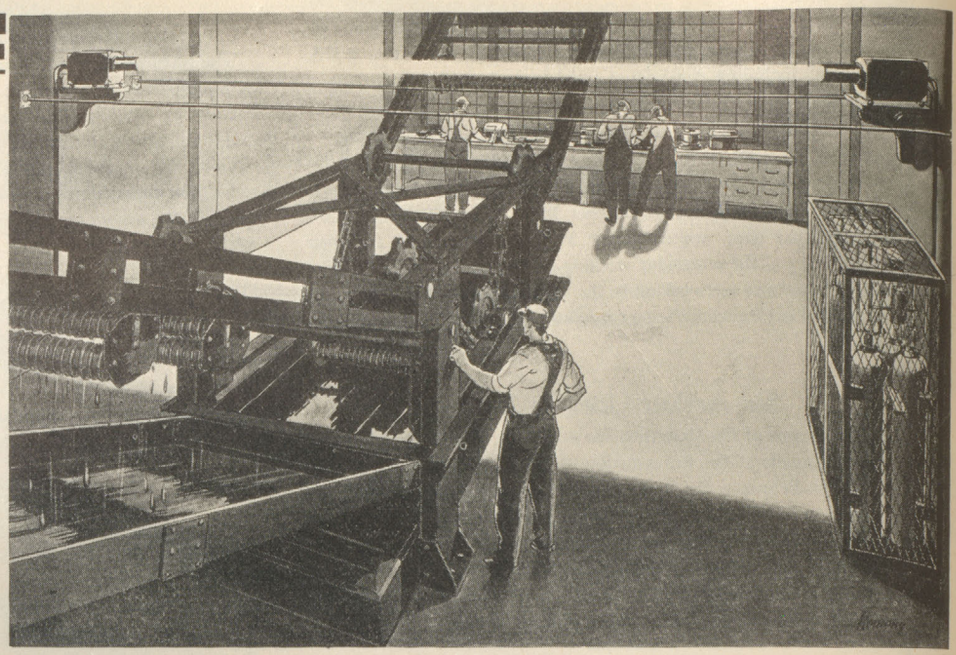
PROFESSOR E. G. D. MURRAY, formerly on the staff of Cambridge University, arrived in Montreal in November to assume duties as Professor of Bacteriology at McGill, in succession to DR. F. C. HARRISON, Emeritus Professor of Bacteriology and Emeritus Dean of the Faculty of Graduate Studies and Research, who retired from active teaching last year. At McGill, Professor Murray will be a member of the Science Group in the Faculty of Arts and Science, and will also have charge of bacteriological work in the Faculty of Medicine. In addition, he will head the Bacteriological Department of the Royal Victoria Hospital, Montreal.

Associate Professor of Philosophy

A British scholar, A. J. D. PORTEOUS, graduate of Edinburgh and Oxford Universities, joined the staff of the University this autumn as Associate Professor of Philosophy. He entered Edinburgh University in 1914, returning, after war service, to graduate in 1921 with an M.A. degree, receiving a similar degree at Oxford two years later. After teaching at Edinburgh, he crossed to the United States to join the staff of Smith College, Northampton, Massachusetts. His appointment to serve under DR. HENDEL at McGill adds an accomplished scholar to the University's roll.

Geneticist Joins the Staff

Amongst those who arrived to join the staff of the University this autumn was DR. C. LEONARD HUSKINS, B.S.A., M.Sc. (Alberta), Ph.D. (London), who has been appointed to the Department of Botany. Dr. Huskins, a geneticist and cytologist, comes from the John Innes Horticultural Institute, London, England, where he acquired an enviable reputation in his particular sphere. Speaking of him, Dr. R. Ruggles Gates, his former teacher, says "He is a geneticist and cytologist who has done work of first-class importance," and Professor R. Newton adds, "There seems no doubt that he should be rated as one of the most promising geneticists of the rising generation." Mr. S. G. Smith, who is Dr. Huskins's research assistant, has accompanied him to McGill.



Electric EYES THAT NEVER SLEEP!

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The New Divinity Hall

On the afternoon of September 24th, the corner-stone of the new Divinity Hall being erected by the Co-operating Theological Colleges of McGill University was laid by W. M. Birks, Esq., a prominent member of the private committee which made the erection of the building possible. Dean Ira A. Mackay delivered an address, the Right Reverend the Bishop of Montreal pronounced the benediction, and the stone was placed in position by Mr. Birks, who said: "In the faith of Christ, to the glory of God, for the promotion of sound learning and the furtherance of understanding and goodwill among Christian people, I declare this corner-stone to be well and truly laid." The building, which will stand on the west side of University Street, near Milton Street, was designed by H. L. Fetherstonhaugh, B.Arch. '09, and is being erected by the A. F. Byers Construction Co., Ltd., at a cost of approximately $400,000, all provided by a group of laymen interested in religious work in Canada.

A Memorial Service

At an impressive service held in Moyse Hall on the afternoon of Sunday, November 17th, the University honoured the memory of the governors, members of the staff, and students who died in the previous year. The Right Reverend the Bishop of Montreal, the Reverend Dr. G. H. Donald, and the Reverend T. W. Jones took part in the religious ceremonies, the Principal delivered an address, and J. J. Weatherseed conducted the male choir, which sang most beautifully. It is proposed to hold a service of similar nature each year at about the same time, in order that the names of those who have died while serving, or in attendance at, McGill shall receive the honour that the University is desirous to bestow.

Lord Moynihan of Leeds, LL.D.

At a Special Convocation held in Moyse Hall on the afternoon of September 18th, the University conferred upon the Right Honourable Lord Moynihan of Leeds, President of the Royal College of Surgeons, London, England, the Honorary Degree of LL.D. In the absence of Sir Arthur Currie, Lord Moynihan was presented to Dean C. F. Martin, Acting Principal, by Dr. E. W. Archibald, Director of the Department of Surgery and Chief Surgeon of the Royal Victoria Hospital, Montreal. T. H. Matthews, Registrar of the University, slipped the LL.D. hood over Lord Moynihan's head and the simple and impressive ceremony, after the customary speeches, was concluded when the Benediction was pronounced by the Reverend Dr. E. L. Pidgeon.

The Molson Basket Collection

In the Molson Basket Collection, housed in the Strathcona Ethnological Museum, McGill possesses a magnificent record of the fast disappearing basket-making art of the North American Indian. A 200-page catalogue of the collection is being compiled by Mrs. Markland Molson, and it is hoped that when this goes to press, about a year hence, the few gaps that now exist in the collection will have been filled. Mrs. Molson is an authority on Indian baskets, and was the first to describe the imbricated basket, her report being published by the National Museum of the United States of America, at Washington, D.C.

Gifts and Bequests

Among the more important gifts to departments of the University announced in recent months were: 12 portfolio volumes, Grimani Breviary, from Lady Roddick, valued at $600; another subscription of $500, from Mr. E. M. Berliner to the Scholarship Fund in the School for Social Workers; $200 from Mrs. G. J. D'Allaird for research in Obstetrics and Gynaecology; a further $1500 from Mr. Russel Cowans and Mr. Alex. Christmas for research in infantile paralysis; $500 from Dean C. F. Martin for a scholarship for special research work in nursing; a bequest of all technical apparatus and books to the Department of Chemistry by the late Dr. Robert Ruttan; and to the McCord National Museum, by Mr. J. S. Snasdell, 18 medals of the British Empire.

McGill Aeroplane Club Affiliates

Full affiliation between the Montreal and McGill Light Aeroplane Clubs was announced on November 5th. The McGill Club, the first university club in Canada, was organized three years ago, and last year undertook the first Canadian intercollegiate flight, when members visited the undergraduate flying club of the University of Toronto. The Club has been active in stimulating interest in aviation in Montreal, and will benefit markedly from the affiliation recently announced. The Montreal Light Aeroplane Club possesses a good clubhouse at the St. Hubert Airport, a number of excellent machines, and a personnel which has conducted many successful experiments. Full ground and air privileges of the Club will now be extended to the men and women from McGill.

Professor Moore on Narcotics

In an interesting lecture on "Narcotics, Their Origin, Use and Abuse," A. B. J. Moore, Professor of Materia Medica at McGill, told members of the Northern Electric Engineering Society recently that 75 per cent of all banditry in Montreal was the work of "dope fiends," or chronic users of narcotic drugs. Opium, discovered in approximately the year 1150 B.C., is the oldest narcotic known and, with its derivatives and substitutes, is at once the curse and blessing of mankind. After touching on many aspects of drug addiction throughout the centuries and in all parts of the world, Professor Moore concluded with an earnest plea for preventive and curative work here in Montreal and elsewhere in Canada. "If only proper provision is made," he stated, "a large percentage of these unfortunates can be saved."

Dr. Bazin's Address at Western

Under the chairmanship of Dr. Hadley Williams, fifth and sixth year medical students in the University of Western Ontario were addressed in October by Dr. A. T. Bazin, Professor of Surgery at McGill. Dr. Bazin's address took the form of a clinic, in which a number of surgical cases were discussed and the method of treatment explained in detail. According to an account of the address in the *Western U. Gazette*, Dr. Bazin created a deep impression, for his "very considerable native ability, profound erudition and vast medical experience," also for his possession of that great asset, natural ability as a teacher.

The Somerville Lecture

Insects, on an average, possess five times the relative muscular power of man, declared Dr. Arthur Gibson, Dominion Entomologist, in the annual Somerville Lecture, delivered in Moyse Hall on the afternoon of November 5th. Continuing, Dr. Gibson stated that 600,000 varieties of insects had been studied and classified, among these many of the types, such as the corn-borer, with which man was in perpetual conflict. Seventy entomologists and 54 assistants, Dr. Gibson remarked, were in the employ of the Dominion Government and, from 16 stations divided among the Provinces, were carrying on the warfare on behalf of the Canadian people. In his account of methods of attacking insect pests by the release of parasites, which joyously undertook the slaughter in accordance with their inherited instincts, Dr. Gibson presented information fascinating in a high degree.

Arts Undergraduate Dinner

Sir Arthur Currie, Professor C. W. Stanley and Professor D. A. Keys were amongst those who addressed the 200 members present at the annual Arts Undergraduate Dinner, held in the Prince of Wales Salon of the Windsor Hotel on the night of November 4th. Replying to the toast of "The University," Sir Arthur voiced a plea for more and more "college spirit," when the words, in their truest sense, were taken to mean loyalty to things worth while, faith in the ability to maintain ideals at all times and in all circumstances, and hope that, through McGill, there would be implanted in the breast of each of her sons that something which, in the eyes of the world, would brand him unmistakably as "a good man." Commenting on deleterious influences sometimes perceptible, Sir Arthur referred to those who would like to "buy" a few outstanding football

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players for McGill, and declared that, so far as he was concerned, he would rather see McGill go down to defeat in every branch of sport, than see her win on the field through methods branded in the eyes of all true sportsmen as unfair and dishonourable.

The Montreal Symphony Orchestra

Under the direction of Dr. Douglas Clarke, Dean of the Faculty of Music, McGill University, a Montreal Symphony Orchestra has been developed, and is presenting a series of Sunday afternoon concerts in the Orpheum Theatre. Attendance at these concerts, a trifle meagre at first, is growing rapidly, and there is no disappointment in the quality of the work the orchestra is producing. Referring to the concert held on November 9th, the critic of the Montreal *Gazette* says: "The concert was in many respects the most successful that the orchestra has yet given . . . and was a triumph from a musical point of view."

45 Years in Chemistry

Marking the beginning of his 45th year on the staff of the University, Professor N. N. Evans, of the Department of Chemistry, addressed the members of the McGill Chemical Society in November. Professor Evans recalled that in 1882, when he entered the University as a student, Professor B. J. Harrington, who taught four other subjects as well, was the sole instructor for the 24 pupils in chemistry. Today, in contrast, there are, as Professor Evans remarked, approximately 400 undergraduates and 50 graduates studying chemistry, with a staff of 22 instructors to help them. In the early '80's there were some 15 books on chemistry in the general library; now 3,000 volumes and many periodicals in a special Chemical Library are available.

Zoological Congress in Italy

Dr. Arthur Willey, Professor of Zoology at McGill, was amongst those who attended the quinquennial International Zoological Congress, held under the auspices of the Italian Government at the University of Padua in September. Dr. Willey presented a paper, illustrated by lantern slides, in the Section of Zooleography.

Life of Dr. J. G. Adami

In the issue dated August 23rd, the London *Spectator* reviews Mrs. J. G. Adami's life of her husband, *J. George Adami* (Constable, 10s. 6d.), recently published. Many McGill men, remembering Dr. Adami with affection, and aware of his outstanding services to the University, will desire to add this book to their shelves. As the *Spectator* says, it is the record of a distinguished career, and a portrait, written with loving detachment and with a praiseworthy elimination of all unessentials.

Professor Leacock's New Book

Economic Prosperity in the British Empire is the title of a book by Professor Stephen Leacock, published recently by the MacMillan Company of Canada, Limited. As an exposition of a policy covering many phases of the Empire's economic development, the book has attracted much attention at home and abroad, reviews having appeared in a majority of the quarterly magazines, and in the columns of the more serious-minded of the Empire's leading newspapers. The book is on sale in Canada at all bookstores. Price, $2.00.

Lectures in Quebec

Under the auspices of the Department of Extra-Mural Relations and the Quebec Branch of the Graduates' Society, a series of six lectures is being presented this autumn and winter in the Chateau Frontenac, Quebec. The first three lectures of the series were delivered in November by Colonel Wilfrid Bovey, head of the Department of Extra-Mural Relations, who lectured on "To the North Country by Air;" Professor T. W. L. MacDermot, of the Department of History, whose subject was "The Hudson's Bay Company"; and Dr. Douglas Clarke, Dean of the Faculty of Music, who lectured on "Understanding Music." The three final lectures will be delivered in January by Dean A. S. Eve, Dr. J. W. Bridges, and Professor P. F. McCullagh, their subjects being "The Aurora Borealis," "The Meaning of Dreams," and "Three Weeks in a Third-Class Spanish Railway Coach."

Union College Honours Sir Arthur

Union College, Schenectady, N.Y., founded in 1795, has appointed Sir Arthur Currie its Honorary Chancellor for one year. Sir Arthur has accepted the appointment, which involves the delivery of an address at the College's 136th Commencement Exercises, to be held on June 15, 1931. A number of prominent men have accepted this honour in the past, including Viscount Bryce, Sir Esme Howard, Mr. Elihu Root, the late Mr. William Howard Taft, and Sir Robert Falconer, President of the University of Toronto. Dr. Frank Parker Day, President of Union College, is a Canadian from Nova Scotia, a former Rhodes Scholar, and a former commander of the 25th Battalion, 5th Infantry Brigade, of the 2nd Canadian Division.

Bodleian Committee Visits McGill

A party comprising members of the Bodleian Library Commission of Oxford University, under the chairmanship of Sir Henry Miers, visited the McGill Libraries in September, and paid high tribute to the staff for the manner in which reading facilities were provided. The visitors were impressed with the cultural riches of the Gest Chinese Research Library, and with the uniqueness of many volumes in the Osler Medical Library. The party is studying libraries in Canada and the United States, previous to presenting a report suggesting improvement in the housing of the 1,000,000 volumes of the Bodleian Library at Oxford.

Department of Chinese Studies

Dr. Kiang Kang-hu, head of the newly-created Department of Chinese Studies at McGill, reached Montreal in September, and assumed duties immediately thereafter. For a time Dr. Kiang Kang-hu, who is an Honorary Consultant of the Library of Congress, Washington, D.C., will be the sole lecturer and teacher in the new department. This session, lectures in Chinese history, geography, culture, philosophy, religion, and art will be delivered, with the possibility of others being organized should the demand arise. As this is the first department of Chinese Studies to be established by a Canadian University, its progress will be watched with keen, though sympathetic, interest.

Prince Tokugawa Visits McGill

Among the distinguished visitors to the University in November was H.H. Prince Lyesoto Tokugawa, member of the Imperial Family of Japan, and President of the Japanese House of Peers. His Highness, who was in Canada to visit his son, the Japanese Minister at Ottawa, was entertained at lunch by Sir Arthur Currie, and afterwards visited the Redpath Library, where he was received by Dr. G. R. Lomer, the librarian. He inspected the Gest Library of Chinese Research, under the guidance of Mr. G. M. Gest and members of the staff, and expressed deep interest in finding this unique Oriental library at McGill.

Crooning College Songs

If one is to believe news items in the daily press, the Publicity Bureau of the University of Toronto has made arrangements as a result of which U. of T. songs will be crooned over the radio by Mr. Rudy Vallee, a well-known performer in the United States, whose rendering of the University of Maine's *Stein Song* has made that air a household and corner garage tune throughout the 48 states of the American Union. Under the heading "Publicity Runs Amuck," the *McGill Daily* comments in its editorial columns in part: "The New York plugger is very good in his way, and will undoubtedly do as much for the *Blue and White* as he did for the *Stein Song*. But there is a limit . . . and we can only utter a fervent prayer for the protection of our own *Hail, Alma Mater*. A jazz version thereof would bring blushes to the faces of all who claim, or have claimed, McGill as their college."

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The Graduates' Society records with deep regret the deaths of the following Alumni:

ANDERSON, MARIAN (M.Sc. '20), on April 10, 1930, in Fredericton, N.B.

ATKINSON, DONALD, C. T. (Sci. '98), on November 17, 1930, in New York City.

BISSONET, ARTHUR E. J. (Law '97), in June, 1930, at Chambly Basin, P.Q.

COLES, SIDNEY F. (past student), on September 1, 1930, in Rochester, N.Y.

COUSSIRAT, HENRI ALFRED (Sci. '01), on November 9, 1930, in Brooklyn, N.Y.

EBERTS, DR. HAROLD F. H. (Med. '15), on November 11, 1930, in Montreal, P.Q.

GULLISON, DR. FREDERICK EUGENE (Med. '17), in October, 1930, in Yarmouth, N.S.

GUNN, THE REVEREND WILLIAM THOMAS (Arts '91), on September 30, 1930, in Toronto, Ont.

HETHRINGTON, FREDERICK JAMES (Sci. '76), on September 11, 1930, in Toronto, Ontario.

HOLMES, MRS. LESLIE (Ruth M. Shatford, Arts '22), on September 21, 1930, in London, England.

JACOBS, DR. ABRAHAM T. (Med. '16), on September 3, 1930, in New York, N.Y.

KINNEAR, THE REVEREND GEORGE F. (Arts '83), on September 11, 1930, in Montreal, P.Q.

LAFLEUR, MAURICE THEODORE (Law '21), on September 4, 1930, in Montreal, P.Q.

LEBEAU, JOSEPH ARMAND (Law '21), on September 8, 1930, in Montreal, P.Q.

MACKAY, DEAN HENRY MARTYN (Sci. '94), on October 25, 1930, in Montreal, P.Q.

MCGIBBON, DR. SALTON (Med. '02), on August 8, 1930, in Edmonton, Alberta.

MCKNIGHT, WILLIAM FALCONER (Sci. '09), on August 24, 1930, at Riverdale, New Brunswick.

OSLER, COLONEL HARRY STRATTON, C.M.G., D.S.O. (Sci. '04), on October 10, 1930, in Toronto, Ont.

PANET, EDOUARD ANTILL (Law '74), on August 12, 1930, at St. Raymond, P.Q.

PETERSON, COL. WILLIAM GORDON (Arts '06), on October 4, 1930, at St. Andrew's University, Scotland.

PORTER, GEORGE FREDERICK (LL.D. '21), on September 21, 1930, in Detroit, Michigan.

REDDICK, DR. ROBERT (Med. '74), on October 10, 1930, in Ottawa, Ont.

RIXFORD, GULIAN P. (Sci. '64), recently, in San Francisco, California.

SCOTT, C. HOPE (Arts '06), on August 26, 1930, at St. Agathe des Monts, P.Q.

WILSON, DR. THOMAS RANKIN (Med. '04, Ph.D. '06), on August 27, 1930, in Montreal, P.Q.

WOOLWAY, DR. CHRISTOPHER (Med. '75), on October 28, 1930, in Duluth, Minn.

In the period covered by this issue of the *News*, the Faculty of Applied Science has suffered most severely through the deaths of a number of distinguished graduates. In addition to the well-nigh irreplaceable loss of Dean H. M. MacKay, to whom Professor Brown pays tribute elsewhere in these pages, the Faculty learned with deep regret of the death of one of its oldest graduates, Gulian P. Rixford, an authority on agriculture in the employ of the Government of the United States, who died in California, aged 92, and that of F. J. Hethrington, another veteran engineer, who, after a long life in the practice of his profession, died in Toronto on September 11th. In addition to these older graduates, the Faculty was grieved to hear late in August of the death of Professor W. F. McKnight, head of the Electrical Department of the Nova Scotia Technical College, Halifax, N.S., past Councillor of the Engineering Institute of Canada, and past chairman of the Halifax Branch. A man of rare personality, Professor McKnight leaves a memory of ability and friendship that will long endure. Similarly, through the death of Col. H. S. Osler, C.M.G., D.S.O., the graduate body of the Science Faculty lost a member for whom many friends will grieve most deeply, and who had served his country well. Just before going to press word was received of the death, while on a visit to New York City, of Donald C. T. Atkinson, well-known lumber operator of Quebec, and of that of Henri Coussirat, Sci. '01, whose son is now a student at McGill and whose father, the Reverend Daniel Coussirat, was Professor of Oriental Languages many years ago.

In the Law Faculty, too, the months since the last issue of the *News* appeared have brought tidings of the deaths of several well-known graduates, the number including A. E. J. Bissonet, of the Class of '97, who died at Chambly Basin, P.Q., in June; M. T. Lafleur, son of the late Eugène Lafleur, K.C., who died in Montreal on September 4th; J. A. Lebeau, who graduated only nine years ago and died just four days after his class-mate, Maurice Lafleur; and E. A. Panet, for twenty years clerk of the Legislative Assembly of the Province of Quebec, who died in St. Raymond, P.Q., on August 12th.

In Arts, the deaths of men outstanding in a number of spheres of activity have also been reported. The Reverend W. T. Gunn, retiring

Moderator of the General Council of the United Church of Canada, died in Toronto following an attack of heart trouble in the last days of September; and the Reverend G. F. Kinnear, former pastor of St. Mark's Church, Montreal, died in the Montreal General Hospital some weeks earlier. In addition to the deaths of these well-known clergymen, Arts graduates were grieved to hear in September of the death in London, England, of Mrs. Leslie Holmes (Ruth M. Shatford, Arts '22), whose personality will live long in the memory of those who knew her at McGill, as will memory of the talent she displayed as an amateur, and later a professional, singer of unusual distinction. From Scotland, in October, came news of the death, while serving on the staff of St. Andrew's University, of Col. W. G. Peterson, son of the late Principal of McGill, who served overseas with the 73rd Battalion, Royal Highlanders of Canada, and, only a few months before his death, notified the authorities at McGill of scholarships he had made arrangements to establish and maintain. C. Hope Scott, who also served in the Canadian forces overseas, and whose death took place at Ste. Agathe des Monts, P.Q., on August 26th, was another graduate in Arts whose passing a wide circle of friends most sincerely deplore.

Early in September, Dr. A. T. Jacobs, a graduate in Medicine in 1916, died in New York City; and in the following month news was received of the death of another young physician, Dr. F. E. Gullison, of the Class of 1917, who died in Yarmouth, Nova Scotia. From other provinces of the Dominion came news that Dr. Salton McGibbon, who graduated in 1902, had died at his home in Edmonton, Alberta, and that Dr. Robert Reddick, of the Class of '74, had died in Ottawa. Dr. T. R. Wilson, who died at his home in Montreal a few days after our last issue went to press, was a graduate of McGill, who had studied arts and theology at Queen's University, Kingston. Montreal suffered the loss of another well-known physician when, on the morning of Armistice Day, Dr. Harold Eberts, assistant demonstrator in the Faculty of Medicine, was killed in his garage in Westmount by carbon monoxide from his car. An older graduate, Dr. Christopher Woolway, who retired from active practice in 1925, died at his home in Duluth, Minn., on his 76th birthday, October 28th. In addition to loss through the deaths of graduates, the University learned with regret of the death of a past-student in Science, S. F. Coles, which occurred in Rochester, N.Y., on September 1st; of that of G. F. Porter, a noted designer of bridges, upon whom McGill, in 1921, had conferred the honorary degree of LL.D.; and of that of Marian Anderson, of Fredericton, N.B., who had gained a Master of Science degree in 1920.

Births

Coddington—In Vancouver, B.C., on July 28th, to Dr. R. D. Coddington, Med. '30, and Mrs. Coddington, a son.

Cope—In Montreal, on August 7th, to E. Selby Cope, Sci. '25, and Mrs. Cope, a daughter.

Currie—In Montreal, on September 24th, to George S. Currie, Arts '11, and Mrs. Currie, a daughter.

Eadie—In Toronto, on September 2nd, to Thomas W. Eadie, Sci. '23, and Mrs. Eadie, a daughter.

Fink—In Ottawa, on August 29th, to Dr. Charles T. Fink, Med. '21, and Mrs. Fink, a son.

Fowler—In Toronto, on May 26th, to Walter D. Fowler, Sci. '15, and Mrs. Fowler, a daughter.

Freedman—In Montreal, on September 28th, to Dr. Newman B. Freedman, Arts '20, Med. '23, and Mrs. Freedman, a son.

Giles—At Toronto, on September 25th, to Drummond Giles, B.Sc. '28, and Mrs. Giles (Eleanor Brooks, Arts '28), a daughter.

Glassco—In Montreal, on November 15th, to E. D. Glassco, past student, Com. '29, and Mrs. Glassco, a daughter.

Goldman—In Montreal, on September 17th, to Dr. L. Goldman, Med. '25, and Mrs. Goldman, a son.

Gordon—At North Bay, on June 15th, to Mr. and Mrs. Murray Gordon, (Isabel Gutelius, Arts '28), a son.

Gordon—In Montreal, on October 13th, to Ney K. Gordon, Com. '27, and Mrs. Gordon, a daughter.

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HAGUE—In Montreal, on October 21st, to Harry McLeod Hague, Law '21, and Mrs. Hague, a son.

HAMPSON—In Montreal, on August 18th, to Harold R. Hampson, Arts '24, and Mrs. Hampson, a son.

HARROWER—In Montreal, on October 17th, to Gordon S. Harrower, past student, and Mrs. Harrower, a daughter.

HERSEY—In Montreal, on September 5th, to Eric M. Hersey, past student, and Mrs. Hersey, a son.

HOWLETT—In Ottawa, on September 17th, to Dr. G. P. Howlett, Med. '06, and Mrs. Howlett, a daughter.

JONES—In Osaka, Japan, on August 21st, to Dr. F. Meredith Jones, Med. '27, and Mrs. Jones, a son.

KNOWLTON—In Montreal, on August 25th, to Mr. and Mrs. Paul Knowlton (Isobel Nixon, Arts '28), a son.

LONG—In Montreal, on August 12th, to J. W. Long, Law '22, and Mrs. Long, a son.

LYONS—In Montreal, on August 18th, to E. L. Lyons, Sci. '15, and Mrs. Lyons, a daughter.

MACLAREN—At Buckingham, on September 14th, to A. B. MacLaren, past student, and Mrs. MacLaren (Mary Gibbs, Arts '19), a daughter.

McCALL—In Montreal, on November 5th, to Mr. and Mrs. G. Ronald McCall (Frances Stocking, Arts '26), a son.

McCRACKEN—In Toronto, on June 8th, to E. G. McCracken, Sci. '24, and Mrs. McCracken, a daughter.

McLEAN—At Niagara Falls, N.Y., on September 22nd, to Duart V. McLean, Arts '23, and Mrs. McLean, a son.

McNAMEE—In Montreal, on September 17th, to Mr. and Mrs. James McNamee (Elianne Dubord, Arts '26), a son.

MORGAN—In Montreal, on September 6th, to Henry W. Morgan, Arts '13, and Mrs. Morgan, a son.

MORRIS—In Montreal, on August 11th, to Dr. Campbell Morris, Agr. '17, Dent. '24, and Mrs. Morris, a son.

MOTT—In Toronto, on August 20th, to Harold E. Mott, Sci. '22, and Mrs. Mott, a daughter.

PONDER—In Montreal, to Mr. and Mrs. A. O. Ponder (Sarah S. Cameron, Arts '20), a son.

RACEY—In Montreal, on October 26th, to Herbert J. Racey, Sci. '26, and Mrs. Racey, a daughter.

ROGERS—In Montreal, on September 11th, to Dr. James T. Rogers, Med. '04, and Mrs. Rogers, a daughter.

SCRIVER—At Montreal, on November 7th, to Dr. and Mrs. Walter M. Scriver (Jessie Boyd, Arts '15, Med. '2), a son.

SEGAL—In Montreal, on October 27th, to Dr. B. W. Segal, Med. '24, and Mrs. Segal, a daughter.

SHAW—At Shawinigan Falls, Que., on November 1st, to T. P. Gladstone Shaw, M.Sc., Arts '20, and Mrs. Shaw, a son.

SUTHERLAND—In Montreal, on October 19th, to William Sutherland, past student, and Mrs. Sutherland, a daughter.

THOMPSON—In Montreal, on August 16th, to Gratton D. Thompson, Arch. '18, and Mrs. Thompson, a daughter.

THOMPSON—In Montreal, on August 22nd, to Dr. R. C. Thompson, Dent. '27, and Mrs. Thompson, a daughter.

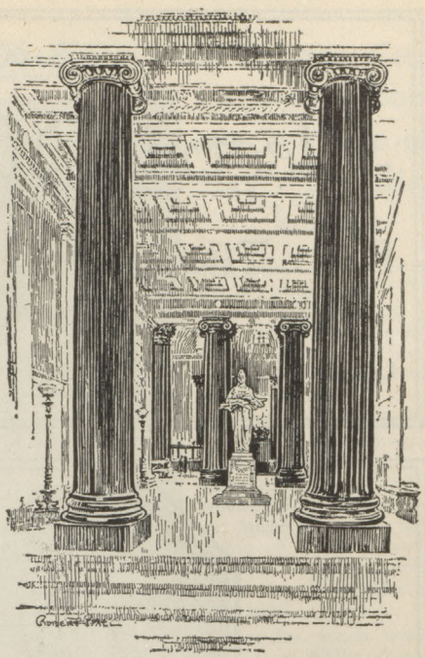
TUCKER—In Montreal, on October 21st, to Mr. and Mrs. Michael L. Tucker (Glen Cameron, Arts '27), a son.

WALDBAUER—In London, England, on August 1st, to Dr. Louis J. Waldbauer and Mrs. Waldbauer (I. Jocelyn Patton, M.Sc., Arts '17), a son. David Jocelyn Bradford.

Marriages

BARIDON—At Chateauguay, P.Q., on September 6th, Miss Edna Peake Mountain, of Ottawa, and Frederick William Baridon, Sci. '13, of Montreal.

BELNAP—In Montreal, on October 18th, Miss Jane I. Belnap, Arts '27, and Herman von Eicken.



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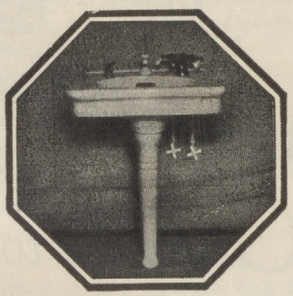
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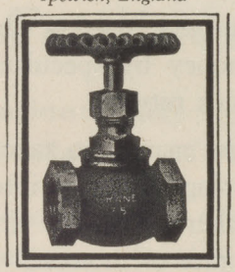
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Surplus and Contingency Reserve	$72,807,000
Assets	$568,197,000
Average rate of interest earned on invested assets	7.02 per cent

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BOYCE—At Huntingdon, Que., on September 17th, Miss Ella Jane Johnston and George Coonly Boyce, Agr. '15, of Athelstan, Que.

BRYANT—In Montreal, on October 8th, Miss Ellen A. James and James Sanborn Bryant, Sci. '26, both of that city.

BUTLER—At North Bay, Ont., on September 9th, Miss Elizabeth Josephine Gordon and Dr. William Shaw Butler. Med. '25, of Ottawa.

CAMERON—At Cornwall, Ont., on June 28th, Miss Mabel A. Cameron, B.H.S. '27, and James K. D. Sims.

CAMPBELL-LATHAM—At Moravia, New York, on September 5th, Miss Sylvine E. Latham, Arts '30, and Herbert N. Campbell, of Westmount.

CARTER—At Tokio, Japan, on October 9th, Miss Beatrice Carter, Arts '28, and Frederick H. Davies, of England.

CARVER—In Montreal, on October 21st, Miss Margaret Mary McDonagh and Dr. John Kenneth Carver, Dent. '23, both of Montreal.

COLE—In Westmount, Que., on September 12th, Miss Ruth Margaret Watson and James Maitland Cole, Sci. '28, both of Westmount.

COSTIGAN—At Guelph, Ont., on October 11th, Miss Catherine Howitt Gummer and James Percival McDougall Costigan, Sci. '26, of Three Rivers, Que.

CROWE—In Westmount, Que., on September 3rd, Miss Mary Margaret Moir and Dr. Albert Douglas Crowe, Dent. '22, both of Montreal.

CULLY—In Ottawa, on August 12th, Miss Muriel Small and Dr. James H. Cully, Med. '21, both of Pembroke, Ont.

DENTITH-BAKER—In Montreal, on September 18th, Miss Mildred L. Baker, B.Sc. '25, and F. H. Dentith, B.Sc. '25.

DUFFY—At Ansonia, Conn., on September 22nd, Miss Ellen Louise Walsh, Ansonia, and Dr. Joseph Leonard Duffy, Med. '20, of London, Ont.

DUNTON—In Montreal, on June 18th, Miss Elise W. Dunton, Arts '25, and Dr. Charles D. T. Mundell.

FERGUSON—In Westmount, on August 9th, Miss Marion E. Ferguson, Arts '27, and Archibald M. Bain, of Winnipeg.

FOWLER—In Ottawa, on September 20th, Miss Ruth Winnifred McDiarmid and Dr. Alan Frederick Fowler, Med. '27, of Montreal.

FRASER-MACKINNON—In Montreal West, on September 20th, Miss Alice Victoria Gwendolyn MacKinnon, Arts '27, and Clarence Harrower Fraser, Arts '23, of Ottawa.

GILLIES—In Montreal, on September 10th, Miss Helen M. Gillies, Arts '24, and Dr. William Kennedy.

GILMOUR—In Montreal, on September 4th, Miss Margaret Alice Costigan and William Alexander Turner Gilmour, Sci. '25, both of Montreal.

HANSARD—In Montreal, on September 27th, Miss Marguerite Barry and Hugh Gerard Hazen Hansard, Law '25, of Montreal.

HODGSON-HYDE—In Montreal, on October 25th, Miss Anne Churchill Hyde, Arts '30, and Jonathan Archibald Hodgson, Sci. '17, both of Montreal.

HUTCHISON—At Prout's Neck, Me., on August 28th, Miss Mary Meredith Thorburn, Toronto, and Paul Phelps Hutchison, Arts '16, Law '21, of Montreal.

JAMIESON—At Conn, Ont., on August 16th, Miss Anna Coutts, Reg. N., and Dr. William Dawson Jamieson, Med. '21, Brussels, Ont.

JEHU-LYTLE—At Buffalo, on August 27th, Miss Cassell Lytle, Arts '28, and Walter Jehu, B.Sc. '28.

JORDAN—At Beauharnois, Que., in September, Miss Grace Adriance Kilgour and John Nealon Jordan, Sci. '23, of Montreal.

JUDSON—In Montreal, on August 20th, Miss Edna Peterson and Charles Judson, Sci. '29, both of Montreal.

KELLY—In Outremont, Que., on September 20th, Miss Isabel Marie King, of Outremont, and Dr. Michael Aloysius Kelly, Med. '26, of Cornwall, Ont.

KENNEDY-GILLIES—In Montreal, on September 10th, Miss Helen MacKechnie Gillies, Arts '24, and Dr. William Roland Kennedy, Arts '22, Med. '25, both of Montreal.

LAIDLEY—In Montreal, on October 9th, Miss Margaret Mary Monsarrat and Wendell Howard Laidley, Sci. '23, son of Dr. I. H. Laidley, Med. '97, and Mrs. Laidley, Montreal.

MACDONALD—In Montreal, on September 17th, Miss Edith Victoria Love and Rev. John Wilkes MacDonald, Arts '28, of Springville, N.S.

MACLEOD—In Montreal, on October 10th, Jean Riddell, daughter of Dr. F. W. Harvey, Arts '94, Med. '98, and Mrs. Harvey, Montreal, and Malcolm Douglas MacLeod, Arts '27, all of Montreal.

MACMILLAN—At Santa Ana, California, on July 19th, Miss Constance Bergen and Dr. Douglas W. MacMillan, Med. '22.

MACNAUGHTON—In Montreal, on August 22nd, Miss Helen Meadows, Cobourg, Ont., and Dr. Eric Alexander MacNaughton, Med. '25, Temiskaming, Que.

MCAVITY—In Amherst, Mass., on August 16th, Miss Rachel Moore Baker and Thomas Adams McAvity, past student, of New York City.

MCKINNON—In Montreal, on September 20th, Miss Alice V. McKinnon, Arts '27, and Clarence H. Fraser, of Ottawa.

MCLAUCHLIN—On June 28th, in Ashland, Penn., Miss Emily Hanburger and Dr. Lucius G. McLauchlin, Med. '24.

MCWATTERS—In Montreal, on September 6th, Miss Marjorie McWatters, Arts '25, and Stewart B. Cuthbert.

MORRISON—In Quebec, on September 6th, Miss Winona Doris Sharpe and James Eric Morrison, M.Sc., '27, of Asbestos, Que.

MUNRO—In Hamilton, Ont., on September 16th, Miss Margaret Woods, of Dundalk, Ont., and William Cauldwell Munro, Sci. '23, of Montreal.

NICHOLS—At Ste. Therese, P.Q., Miss Iris A. Nichols, B.H.S. '27, and Fowler Fraser Fulton, B.Sc., of Fredericton.

NOTKIN-JACOBS—On June 29th, in Montreal, Miss Leah Jacobs, R.V.C. '23, and David M. Notkin, LL.B., past student.

PETERSEN—In Montreal, on September 10th, Miss Edith Marguerite Daniel, North Sydney, N.S., and Dr. James Norman Petersen, Arts '20, Med. '23, of Montreal.

PRINGLE-WILSON—In Montreal, on June 27th, Miss Jessie Wilson, Arts '29, and John B. Pringle, B.Sc., '24.

QUACKENBUSH—In Montreal, on August 30th, Miss Margaret (Madge) Paterson Bray and Dr. James Gordon Quackenbush, Med. '24, of Three Rivers, Que.

REID—At Lennoxville, on September 3rd, Miss Jean D. Reid, Arts '28, and Kingsley Higgins.

ROSE—In Montreal, on May 16th, Miss Lottie Rose, Arts '30, and John Fish, of London, England.

ROSS—At Lac des Iles, Que., on August 22nd, Miss Eleanor Campbell Mott, of New York City, and Douglas Allen Ross, Arts '28, of Montreal.

RUSSEL—In Montreal, on April 10th, Miss Dorothy M. Russel, Arts '23, and Archibald Lyle Williams.

SCOTT—In Montreal, on September 25th, Miss Ruth Margaret Aird and Lewis John Scott, Sci. '23, both of Montreal.

SHEARWOOD—At Manaton, England, on May 12th, Miss Grace E. Shearwood, Mus.Bac. '23, and Charles F. Furse.

SHOTWELL—In Ottawa, on September 20th, Miss Mary Lorn McLean, of that city, and John Stuart Glashan Shotwell, M.Sc., Sci. '23, of Woodbury, N.J.

STAVELEY—In Montreal, on September 18th, Miss Emily Eddy (Amy) Vivian and Walter Darley Staveley, Sci. '11, both of Montreal.

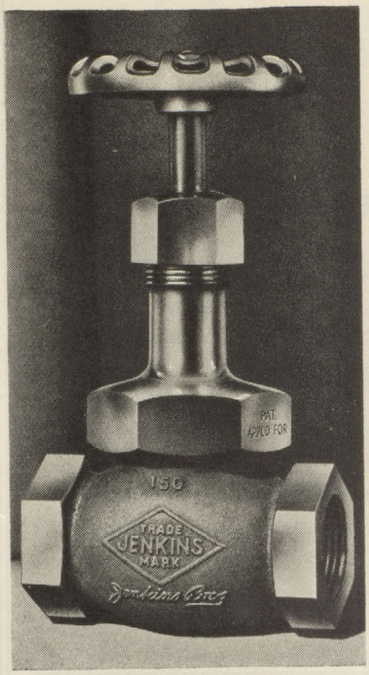
TREMAIN—In Kingston, Ont., on September 20th, Miss Nora Patricia Bermingham and Kenneth Hadley Tremain, Sci. '29, of Shawinigan Falls, Que.

VOSS—In Montreal, on October 30th, Miss Florence Muriel Norton and Dr. Harry Edward Voss, Med. '29, of Bronxville, N.Y.

WOOLLCOMBE—In Ottawa, on November 8th, Miss Lillian Althea Baker and Edward Mickle Woollcombe, Sci. '23, both of Ottawa.

WORRALL—In Montreal, on August 30th, Miss Alice Worrall, B.Sc. '25, and David Semple Christie, both of Montreal.

FIGURE 106-A . . . with the one-piece screw-over bonnet and slip-on stay-on disc holder



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Alumnæ Notes

1904—Catherine I. Mackenzie has been appointed Lady Principal of the High School for Girls, Montreal.

1912—Beatrice Hadrill, who has been Superintendent at the Sweetsburg Hospital for some time, is studying this winter in the School for Graduate Nurses at McGill.

1926—Kathleen Jenkins has taken the place of Miss Saxe as librarian of the Westmount Library.

1929—Gwen Roberts is on the staff of the Royal Victoria College, while studying for her M.A. in history.

Regina Schoolman has returned from Paris where she was studying at the Sorbonne, and is completing her M.A. in French at McGill.

Sally Cox is employed in Simpson's Department Store in Montreal.

1930—Isabel Rowat, who was awarded a scholarship by the French Government, is continuing her studies at the Sorbonne this winter.

Dr. Ethel MacLean is an interne at the Children's Hospital in Boston.

Roberta Henderson has accepted the position of librarian at the Y.W.C.A. in Montreal.

Mrs. T. R. Davies (Marion White) is living at Ponoka, Alta., where her husband has been appointed minister.

Among those who received their M.A. degree at the October Convocation were:—Elizabeth R. Grant, Outremont; Muriel S. McHarg, Montreal; Evelyn C. E. Wilson, Westmount.

Among those receiving the B.Com. degree was Evelyn Cornell, Westmount.

The Canadian Federation of University Women has established a Bureau of Vocations for Women, with offices at 224 Bloor Street, West, Toronto, and will be pleased to receive and record information regarding university graduates, their qualifications and activities. This information will be welcome, even if the graduates are not at the moment interested in hearing of appointments available.

Personals

The *News* welcomes from graduates personal items for inclusion in these columns. Press clippings, or written notices, should be sent to H. R. Morgan, Esq., care of Recorder Printing Company, Brockville, Ontario; or to The Executive Secretary, Graduates' Society, McGill University, Montreal.

Lieut.-Col. Maurice Alexander, Law '10, has been appointed as the British Government's representative to the International Court at the Hague, in relation to inter-Allied war claims against former enemy countries. He served for a time as Judge Advocate-General of the Overseas Military Forces of Canada during the Great War.

J. Arthur Mathewson, K.C., Arts '12, Law '15, has been appointed Chairman of the Protestant Board of School Commissioners in the City of Montreal. Mr. Mathewson, who graduated with first-class honours in political science and economy at McGill, and afterwards served overseas with the 42nd Battalion, Royal Highlanders of Canada, is the senior partner in the legal firm of Mathewson, Wilson and Smith, Montreal.

J. L. O'Toole, M.Sc., Ph.D., has been appointed Assistant Professor of Chemistry in the University of New Brunswick.

Rhoda I. M. Rowat, Arts '30, holder of a French Government Graduate Scholarship, left Montreal in October to study at the Sorbonne.

Keith S. Pitcairn, Arts '28, who has been teaching in West Hill High School, Montreal, for two years, is proceeding as an exchange student to study educational methods in Scotland.

Mr. Philip J. Turner, F.R.I.B.A., Special Lecturer in the School of Architecture, was in September last elected a Fellow of the Royal Architectural Institute of Canada.

Ezra B. Rider, Sci. '09, formerly engineer with the Water Department of the City of Los Angeles, is now assistant engineer of the Metropolitan Water District of Southern California, Los Angeles.

Allan B. Latham, Arts '26, M.A. '27, son of Professor G. W. Latham of the Department of English, has been appointed an instructor in economics at Williams College, Massachusetts.

The third Empire Mining and Metallurgical Congress, which assembled in South Africa earlier in the current year, was marked by a dinner in Johannesburg, attended by eleven engineering graduates of McGill, the visitors being Messrs. W. M. Archibald, '97, F. W. Maclennan, '98, G. A. Gillies, '10, L. S. Weldon, '21, and T. P. Cochran, '25. The South African delegates were: Messrs. J. M. McPhee, '04, C. S. McLean and E. P. Cowles, '10, G. C. Jones, '12, J. A. Becking, '24, and F. G. Dunning (past student).

R. W. Boyle, Sci. '05, M.Sc. '06, Ph.D. '09, Director of the Division of Pure and Applied Physics, National Research Laboratories, Ottawa, contributed an article recently to *Industrial Canada*, outlining the work his Department was conducting. Aeronautical research, research in thermodynamics, radio research, hydro-electric research, more particularly in the sphere of high voltages, and research in pure science, are among the studies contemplated, or actually in progress. The value of these studies to the Dominion would be almost impossible to exaggerate.

After general practice for some years in Minto, N.B., followed by studies, under Dr. MacKim Marriott in St. Louis, Mo., Dr. D. F. W. Porter, Med. '25, is now practising as a specialist in paediatrics in Saint John, N.B.

Mrs. Leslie G. Bell (Florence Seymour, Law '20), of the firm of McGibbon, Mitchell & Stairs, Montreal, has been elected vice-president for Canada of the National Association of Women Lawyers. Mrs. Bell was admitted to the bar of Nova Scotia in 1921.

A stained glass window and brass tablet were unveiled in Trinity Church, Bond Head, Ont., on September 30th, to the memory of Sir William Osler, Bart., Med. '72, as the gift of the Simcoe County Medical Association. Bond Head was the birthplace of Sir William, and his father was the first rector of the parish.

Dr. M. A. Oulton, Med. '07, has resigned as member of the New Brunswick Legislature for Westmoreland, to become Medical Officer of the New Brunswick Workmen's Compensation Board.

(*Continued on page 66*)

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Recent Gifts and Bequests

The University has announced recently the following gifts and bequests:

TO THE FACULTY OF MEDICINE

$2,500 from the Winthrop Chemical Company, Inc., New York, to the Dept. of Pharmacology to create a special fund to be called the "Winthrop Pharmacological Fund," for the investigation of a certain substance called "Avertin."

$3,000 from the Trustees of the American Otological Society, New York, Research Fund for research in Otisclerosis.

$1,000 from the Sun Life Company, through Mr. T. B. Macaulay, for the purpose of sending someone to England to study the technique of Sir James Purvis Stewart for the cure of insular sclerosis.

$100 Dr. A. D. Blackader, to the Pharmacological Library Fund.

$500 Mr. Russell Cowans, for research work being done by Dr. Goldbloom on Infantile Paralysis.

TO THE SCHOOL FOR GRADUATE NURSES

$1,000 bequest from the late Louise M. Dickson, to establish the "Flora Madeline Shaw Memorial Fund."

TO THE LIBRARY

$250 from Dr. A. D. Blackader, to the Gordon Home Blackader Library of Architecture. From friends, 577 volumes and 1,054 pamphlets and periodicals.

TO THE FACULTY OF ARTS

$500 a year for four years from Mr. W. M. Birks to establish a scholarship in the Department of Classics, for a boy to be selected from certain British Public Schools.

TO THE FACULTY OF LAW

$1,000 from Miss M. A. Nutting, New York, for the purpose of establishing a memorial to her brother, Charles A. Nutting.

TO THE UNIVERSITY

From the late Charlotte L. Lloyd, Quebec, bequest of her stamp collection.

McGill Graduates' Lectureships

ACCORDING to an announcement made recently by the Principal, the first series of lectures under the McGill Graduates' Lectureships plan will be delivered between March 10 and April 10, 1931, by Professor W. G. S. Adams, Gladstone Professor of Political Science, Oxford University, whose subject will be covered by the general title "Aspects of Progress in the 20th Century."

Deep interest attaches to the above announcement, as the coming of Professor Adams and the delivery of the twelve lectures he will have prepared will mark the inauguration of the lectureships to which the revenue from the Graduates' Endowment Fund has been allotted. Similar lectureships, such as the famous Gifford Lectures and Hibbert Lectures in the universities of the Old Country, have become events of more than nation-wide importance, and it is confidently believed that the series soon to be inaugurated at McGill will in time bear fruit of no less significance.

In the choice of the man who is to deliver the first series of lectures under the plan, and through his acceptance of the invitation to do so, McGill would seem to have been most fortunate. Professor Adams, in addition to his duties as Professor of Political Science, is a member of the Hebdomadal Council, or governing executive, of Oxford University, and was a member of the Royal Commission on Oxford and Cambridge appointed some few years ago. He has been instrumental in founding the new School of "Modern Greats" at Oxford, and, during the war, was Secretary to the Prime Minister's Department. He is now Chairman of the Rural Community Council, a body doing much for the vitalizing of life in rural England, and has been a Lowell Lecturer at Harvard University.

Professor Adams is of Scottish ancestry, and is noted for his deep, moral earnestness and sense of public duty, these characteristics being warmed, as Sir Arthur Currie has observed, by natural humour and tempered by rich experience. His coming to Montreal, it is believed, will have a stimulating influence on the student body, the staff of the University, and the intellectually inclined citizens of Canada. Graduates who are interested in the lectures to be delivered should remember that the series will start early in March. Further details will be given in the March number of the *News* and, even before the March appearance of the *News*, in the daily press of Montreal. With attendance promising to constitute a record in the University's history, a memorable inauguration of the McGill Graduates' Lectureships seems assured.



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McGill Wins Five Championships

(*Continued from page 48*)

in mid-October and participated in by McGill, Toronto, University of Montreal, Queen's, and Royal Military College, McGill won the finals of both singles and doubles, successfully defending the Intercollegiate Tennis championship by a margin of 13 points to 'Varsity's 7, University of Montreal's 6, Queen's 4, and R.M.C.'s 1. C. W. Leslie, the McGill captain, won the final of the singles from Sheppard, of Queen's, and paired with Ross Wilson, defeated Noyes and Balfour, of Toronto, in the final doubles.

Golf

After two days' play over the course of the Mount Bruno Country Club, near Montreal, a McGill Golf team defeated teams from 'Varsity and Queen's to add another Intercollegiate championship to McGill's score. Toronto held the title last year, but McGill scored 15 points in this year's clash and 'Varsity scored only 11. Queen's did not prove a serious factor in the two days' play, gaining only 1 point. Apart from intercollegiate golf, the season was marked by a good contest between students and professors over the course of the Royal Montreal Golf Club at Dixie. The students won 31-20, thereby gaining possession of a handsome challenge trophy, presented by Dr. F. M. G. Johnson, and named by him the "Dr. B. J. Harrington Trophy," in honour of a former head of the Department of Chemistry, whom Professor Evans has characterized as "probably the best-loved professor ever in McGill."

Personals

(*Continued from page 63*)

The American Telephone and Telegraph Co. has presented $25,000 to the American National Academy of Sciences for the establishment of an award to be known as "The John J. Carty Medal and Award for the Advancement of Science." General John J. Carty, in whose honour the gift was made, received an LL.D. degree from McGill in 1917.

Dr. Ellice McDonald, Med. '01, Director of Cancer Research in the Graduate School of Medicine of the University of Pennsylvania, is carrying out work in co-ordinating the results attained in many laboratories and clinics in the United States, Europe, and Canada. Dr. McDonald is to be congratulated on the success of his efforts so far, and his colleagues at McGill wish him continued success in the future. In a pamphlet recently issued by the University of Pennsylvania, the annual death rate from cancer in the United States is estimated at 160,000 and the total of those suffering from the disease at almost 1,000,000. These figures explain why cancer is regarded as the most pressing medical problem of our day and generation,

Dr. R. Tait McKenzie, Arts '89, Med. '92, has been commissioned to execute a statue in bronze of Bliss Carman, to be erected over the poet's grave at Fredericton, N.B.

A. K. Snelgrove, M.Sc., Sci. '27, of St. John's, Newfoundland, received the degree of Ph.D. in Geology at the June commencement of Princeton University. Dr. Snelgrove is lecturing at Princeton in Mineral Resources for the session of 1930-31.

Colonel R. F. Stockwell, Arts '08, Law '11, of Cowansville, Que, Officer Commanding the Fourth Mounted Brigade, has been elected president of the Canadian Cavalry Association.

Dr. J. A. Tallon, Med. '19, has been elected vice-president of the Cornwall, Ont., Medical Association, the secretary-treasurer of which is Dr. H. J. Mack, Med. '16.

After furlough in Canada, during which she worked in the Vancouver General Hospital, Dr. Gladys Cunningham (Gladys V. Story, Arts '15) has accompanied her husband, Dr. Edson Cunningham, to resume work in China under the Foreign Mission Board of the United Church of Canada. Dr. Gladys Cunningham in June passed the examinations of the Dominion Medical Council. She is a graduate in Medicine of the University of Manitoba.

The Colonial Auxiliary Forces' Officers' decoration has been conferred upon Lt.-Col. Walter C. Hyde, D.S.O., Sci. '15, of the 2nd Regiment, Canadian Artillery, Lt.-Col. H. A. Chisholm, C.M.G., D.S.O., Med. '01, and Lt.-Col. C. W. Vipond, D.S.O., Med. '95, of the Canadian Army Medical Corps.

George O'Brien, Agr. '13, has been for some time General Manager of the Canadian Co-operative Wool Growers, an organization which has made rapid progress under his direction.

T. H. Harris, M.A., Arts '26, Law '29, has joined the research department of McConnell and Fergusson, Limited, Montreal. His master thesis on "The Economic Aspects of the Crow's Nest Pass Rates Agreement" was published this year as one of the National Problems of Canada series. For the past year, he has been attending the graduate school of Yale University, with a Strathcona Memorial Fellowship.

J. C. Alguire, Law '80, of Cornwall, Ont., has been re-elected for the twelfth time treasurer of the Ontario Registrars' Association.

C. J. McGerrigle, Arts '23, has been appointed secretary of the Cote St. Paul branch, Montreal, of the Y.M.C.A.

The retiring president of the British Medical Association, Dr. W. Harvey Smith, Med. '92, of Winnipeg, has now been chosen as president of the Canadian Medical Association.

One of the last works of the late Rev. Dr. W. T. Gunn, Arts '9., was to produce a volume of five-minute sermons entitled "Homely Homilies," which has gained a wide circulation throughout the United Church of Canada, of which he was a former Moderator.

Lieutenant-Colonel H. E. Munroe, O.B.E., Med. '03, of Regina, has been appointed the Saskatchewan member of the new Dominion Pensions Tribunal.

Dr. E. W. Hammond, Vet. '99, has completed thirty years in the service of the City Dairy, Toronto, of which he is chief chemist and bacteriologist. On the occasion of the anniversary, he was presented with a gold watch by the management of the company.

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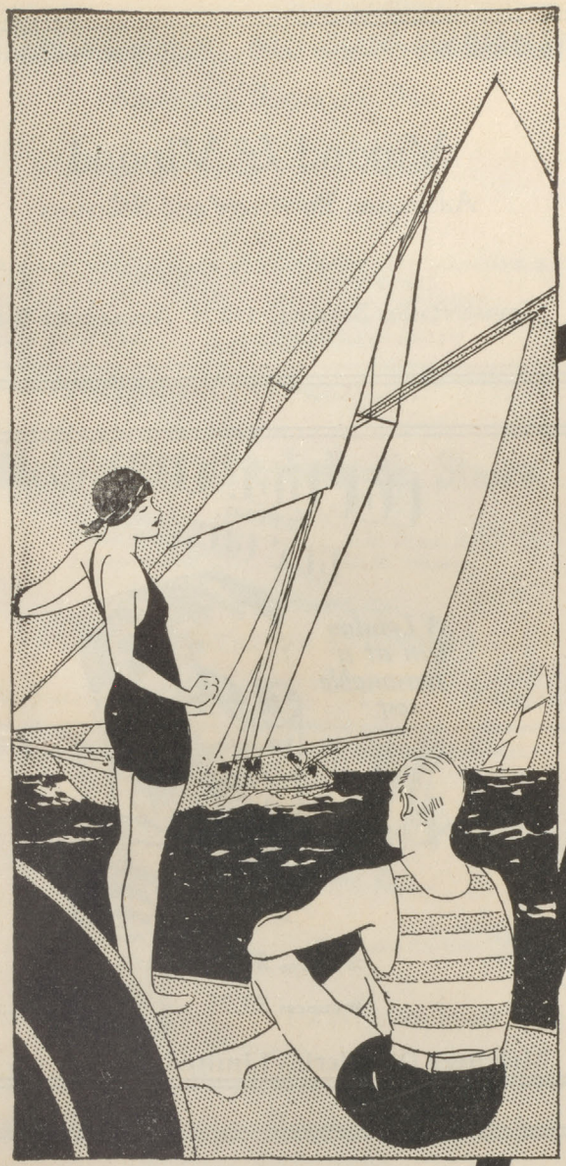
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Miss A. W. Turner, Arts '27, who was at work in the Dominion Observatory this summer, is now studying at Newnham College, Cambridge University.

Mrs. D. M. Notkin, formerly Miss Leah Jacobs, R.V.C. '23, is President of the Council of Jewish Women, Montreal.

Edgar Marrotte, Arch. '16, who has been employed for some years by prominent firms of architects in New York, is establishing his own office in Montreal.



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1878

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1885

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1886

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1898

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BRITISH EMPIRE EXHIBITION, LONDON
1925

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1929

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Third Quinquennial REUNION of McGill Alumni, October, 1931

Revisit Old McGill

THE Executive Committee of the Graduates' Society announces that plans are being made for the holding of a reunion of alumni next October. All graduates and past students are cordially invited to revisit McGill at that time, and to participate in the reunion activities and festivities.

As will be remembered, the First Reunion was held in 1921 following the war, and to celebrate the 100th Anniversary of the founding of the University. So successful was the occasion, and so general the feeling that reunions should be held at regular intervals, that a Second Reunion was held five years later, in October of 1926. Five years more have passed and once again the graduates of Old McGill are being called to assemble.

The programmes of the former reunions were so generally satisfactory that this year most of the items will be repeated. As will be noted from reference to the tentative programme outlined below, visiting graduates will be given the opportunity of renewing old acquaintances with fellow students, of seeing the College Football, Track and Rowing Teams in action, as well as of making contacts once more with the educational activities of the University.

At the present time it is impossible to give the exact dates in October on which the reunion will be held, but further announcements will follow in later issues of "The McGill News" and through the columns of the daily press as well as by circular letter. Those desiring special information are requested to write G. B. Glassco, Executive Secretary, The Graduates' Society, McGill University, Montreal.

TENTATIVE PROGRAMME

Opening Day (Wednesday)	Morning	—Registration.
	Afternoon	—University functions including
	Evening	Founder's Day Convocation.
Second Day (Thursday)	Morning	—Lectures, Clinics, Excursions, etc., by various faculties.
	Afternoon	—Intercollegiate Rowing Race.
	Evening	—Fraternity or group dinners.
Third Day (Friday)	Morning	—General Meeting Graduates' Society of McGill University.
	Afternoon	—Intercollegiate Track Meet at Molson Stadium.
	Evening	—Reunion Dinner.
Fourth Day (Saturday)	Morning	—Unallotted.
	Afternoon	—Intercollegiate Football— 'Varsity vs. McGill.

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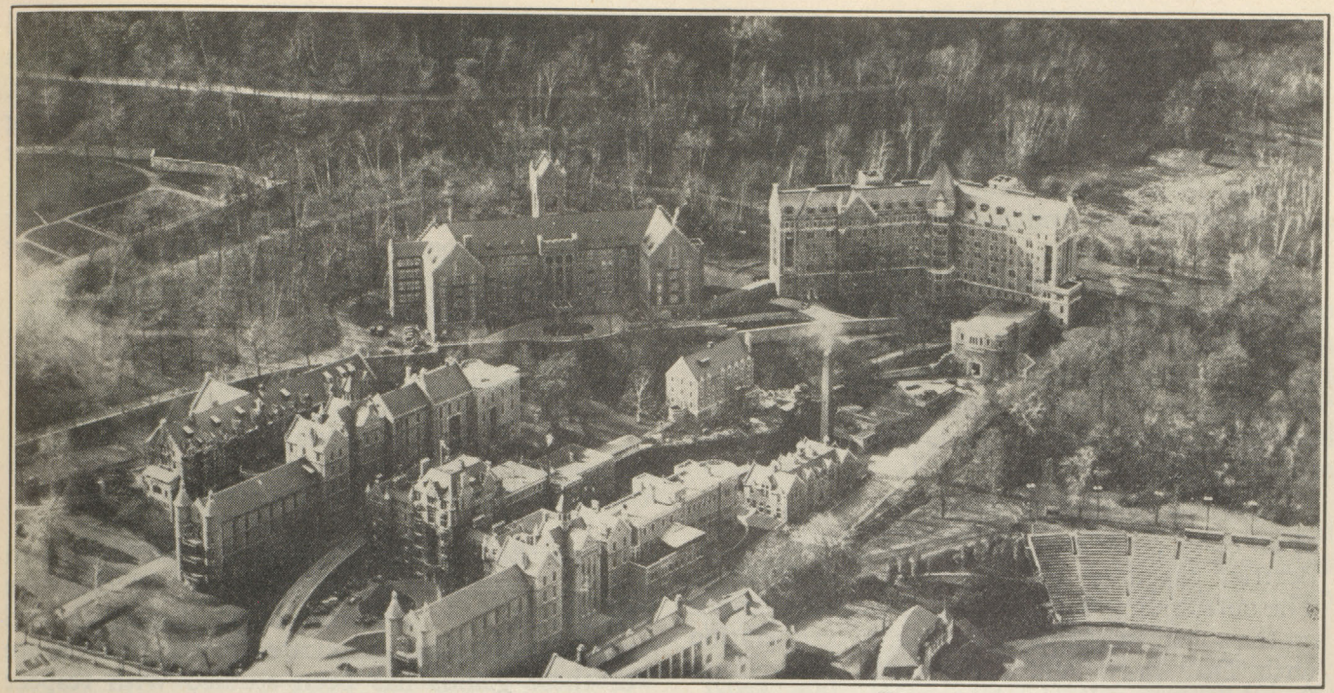


Photo by Compagnie Aérienne Franco-Canadienne

THE ROYAL VICTORIA HOSPITAL FROM THE AIR

This new photograph shows the main buildings of the hospital, the Ross Memorial Pavilion, and the pavilion of the Royal Victoria Montreal Maternity Hospital. At the top of the picture is the driveway in Mount Royal Park; in the centre is the recently completed residence for internes; and in the lower right corner are the seats of the Percival Molson Memorial Stadium.

Medical Research

(A Summary of Contributions to Scientific Literature Made in 1930 by the Medical Faculty of McGill University)

By DEAN C. F. MARTIN

IT must ever be a matter of interest to the medical graduate of McGill to know what his alma mater is achieving in the fields of teaching and research, to see the milestones marking the successive frontiers of scientific knowledge as that knowledge grows from year to year.

So rapid has been the growth of facilities for conducting scientific research in the McGill Medical School, and so greatly has the value of the laboratories been increased through additional accommodation, equipment, and personnel, that a summary of recent developments will interest many readers.

This is by no means intended as a complete list of publications for 1930 (for which the reader is referred to the official list of University publications), but rather a general indication of the lines along which progress is being made.

McGill has always been a great clinical school, with unusual hospital facilities. For this reason it has fostered its clinical teaching as the outstanding feature of its educational programme; and the scientific approach to practical medicine has more than anything else characterized its research work in the last decade. On the other hand, the purely academic aspect has not been neglected, and the many contributions to pure science mentioned below bear ample testimony to this fact.

I would add a word of thanks to the generous citizens who have helped during 1930 to foster scientific study, namely: Messrs. R. Cowans and A. Christmas, Dr. Hiram Vineberg, Mrs. J. R. Fraser, Mr. E. Rossiter and his friends, Mr. P. P. Cowans and Mr. J. W. McConnell, also the Rockefeller Foundation, the American Otological Society, the late Mrs. Ottman and the Ehret family of New York.

Biological Sciences

Biochemistry: Among the outstanding achievements of the year has been the work of Prof. J. B. Collip in sex physiology and sex hormones. His publications on the ovary-stimulating hormone

of the placenta are already widely known, as are the clinical observations of his associate, Dr. A. D. Campbell. The subsequent discovery of an anterior pituitary hormone in the human placenta by Collip (with D. L. Thompson) is a new feature. Studies on the parathyroid (Collip) have been continued by him and his associates (Allardyce and Pugsley).

Other problems studied by his staff include (1) The Influence of Hyperventilation on the experimentally produced gastric secretion (Dr. J. S. L. Browne and A. Vineberg); (2) The Determination of Cholesterol (R. U. Harwood); and (3) A Method of Studying Tissue Chemistry (R. L. Kutz).

Anatomy: (Prof. S. E. Whitnall). The addition of an extra professor on a full time basis (Dr. J. Beattie) has done much to stimulate research. The outstanding work has been his investigations on the spinal sympathetic centres, in co-operation with Drs. Brow and Long (vide Proceedings Royal Society of England).

Other publications by Dr. Beattie are concerned with the Neurology of Micturition and an Anthropologic Note on two skulls from Teneriffe, as well as studies, in progress, on the III Nerve and the Lacrimal Secretion.

A magnificent series of preparations of the accessory sinuses of the nose for both teaching and research has been made by Dr. MacDermot.

Prof. Whitnall has been preparing a new edition of his work on the Human Orbit, as well as articles for a text-book on Practical Anatomy, and has in progress some investigations on the fascia and so-called fascial planes.

An interesting pamphlet on the History of Anatomical Illustrations was prepared to accompany an exhibit of literature on the subject.

Histology: Prof. J. C. Simpson and staff are co-operating with Prof. Babkin in a histological study of the mechanism of digestive secretion (Dr. Bowie).

Dr. D. P. Mowry (Dental Department) has studied the innervation of the epithelium of the mouth and gums.

Physiology: To meet the special needs of this Department, through the appointment of Professor Babkin as Research Professor of Physiology, two independent laboratories have been created, the one under Prof. John Tait, the Director and Professor of Physiology, and the other purely for research in charge of Prof. Babkin.

Prof. Tait and Dr. McNally have studied the sense organs of the inner ear (8th nerve), dealing with equilibrium and other functions of the inner ear. Important conclusions have resulted with respect to oto-sclerosis, progressive deafness, and bone conduction of sound. Progressive deafness has also been studied by Dr. Dworkin and Dr. Sutherland (in sound proof rooms), suggesting the existence of a special vibration centre in the brain.

Dr. D. A. Ross has been recording the conditioned responses of the VIIIth nerve after ablation of the saccular macula.

Other studies concern:—

Bone Growth and Bone Development (Prof. Giblin).
The Problem of Absorption from Joints and of Joint Lubrication (Dr. N. McLellan).
Infections of the Blood Stream (Townsend).
Immunity Problems (Brodie).
The Processes of Urine Propulsion (Strasburg).

Prof. Babkin and his research staff have been chiefly interested in the study of the digestive tract, its secretory and motor functions and mechanism. The complicated histological nature of these glands has been studied with respect to their physiological action, and the conclusion has been reached that various functions acting independently operate under different stimuli and for different purposes. As a result of these investigations, some new tests have been adopted for human beings, which bid fair to have great clinical value. The effect of histamine on various functions of secretion has also been studied in detail. Pancreatic secretion has also been investigated with a view to confirming the suspicion that it is not only continuous but spontaneous. The relation to the sympathetic nerves was likewise a subject of investigation.

Professor Babkin, who is an authority on conditioned reflexes, is co-operating with others in a very interesting study on the problems of deafness.

Pathology: Pathological research is carried on in the Pathological Institute of the University and in the laboratories of the Montreal General Hospital. At the Pathological Institute (Prof. Oertel), the Director's contribution to the mechanism of cancer development, and a paper on the necrotic sequestration of the kidneys in pregnancy (with Dr. Scriver) are of special interest.

Other contributions by his staff embrace the following:

"An Anatomical Study of Subdural Haemorrhage associated with Tentorial Splitting." (Dr. Chase.)
"Lesions in the Brain and Spinal Cord associated with Disturbances of Metabolism—of Glycogenic Centre and Respiration." (Chase.)
"On the Age Incidence of Carcinoma." (Drs. Waugh and Fisher.)
"On Sickle-cell Anemia." (Drs. Jessie Scriver and Waugh.)

"On Degeneration of the Bone Marrow." (Dr. Paul Michael.)
"On Hypochromic Anemia with Gastric Achlorhydria." (Waugh.)

Following upon a discovery by the Director several years ago of the abundant distribution of nerve fibres in tumours, he and his staff are continuing these investigations, as also some problems with respect to the cellular changes in the brain in relation to apoplexy and softening.

At the Montreal General Hospital the following contributions from the laboratory are noteworthy:—

"The effect of long continued Chronic Inflammation upon the Mucous Membrance of the Genito-urinary Tract." (F. Patch.)
"Tumors of the Urinary and Genital Organs." (Patch.)
"Experiments with Animals on the effect of the lack of certain Vitamines." (S. H. McKee.) (See also Ophthalmology.)
"A Study of Follicular Gastritis"—of special interest in view of the comparatively large re-sections of the stomach now possible in surgical procedure. (R. Fitzgerald.)
"Studies on the Pathology of the Thyroid Gland." (R. Fitzgerald.)
Articles on Thyroiditis and on Bony Metaplasias. (P. G. Silver.)
On Papilloma of the Stomach and its relation to Malignancy. (F. D. Ackman.)
On Congenital cysts of the Liver. (Ackman with Prof. Rhea.)
Certain types of Tumors of the Intestinal Tract.
On Thrombosis of the Larger Vessels in the Mesentery. (Ackman.)

D. M. Angevine has published articles on primary carcinomas of the anal region, while from Dr. J. F. Pritchard are several articles on tumours of the lung, tumours of the bones and on the application of technical methods to differential diagnosis, as also (with Dr. McRoberts) an article on Phlegmonous Gastritis.

An interesting study of infection of surgical wounds with B. Diphtherias has come from Miss Prissick, and another on Congenital Diverticulum of the Stomach from Dr. W. B. Allen.

At the Children's Memorial Hospital, Drs. Rhea and Touzel have made studies of (a) Bronchiectasis in children; and (b) the identification of Tubercle Bacilli from the Tuberculous Lesions in infancy and childhood.



A LABORATORY SCENE IN THE MONTREAL GENERAL HOSPITAL

This photograph, taken specially for the *News*, shows the Chemical Laboratory, Blood Chemistry Section, Metabolism Department, where, under the direction of Dr. I. M. Rabinowitch, more than 45,000 analyses are made each year.



PROFESSOR J. B. COLLIP

Director of the Department of Bio-chemistry, who was associated with Drs. Banting, Best, and McLeod in the discovery of insulin at the University of Toronto, and more recently, at McGill, has accomplished work in sex physiology and sex hormones of an outstanding order. His parathyroid extract was another accomplishment of major value.

Bacteriology: The Department of Bacteriology has acquired the services of a new professor—E. G. D. Murray—formerly in charge of the Bacteriology Department of Cambridge University, England.

Under his guidance investigations have already been undertaken by Dr. W. W. Beattie on the epizootic produced by the haemolytic streptococcus, by Mr. H. L. Tarr, in conjunction with Prof. Hibbert, on the synthesis of polysaccharides by bacteria and enzymes, as also a number of studies of bacterial metabolism.

Dr. Townsend is studying the relation of complement to streptococcal infections and its interaction with immune bodies.

Other work is being done on the mechanism of localization of staphylococcus in tissues, and other investigations on bacteriophage.

Pharmacology: (Prof. Stehle). Research has concerned (1) the action of scillaren B., a new substance with possibilities as a remedy in heart disease; (2) of pituitary extract, the action of which upon the heart and blood vessels has heretofore been quite unclear; (3) of a new anesthetic (avertin), which in some respects is superior to other anesthetics now in general use.

Dr. K. I. Melville, after two years spent in Paris, is studying methods used in the search for new synthetic drugs, and has two papers on the actions of new mercury compounds.

Clinical Sciences

Medicine: Two outstanding gifts have enabled this department to carry on research work of a high order. These were the grant of half a million dollars from the Rockefeller Foundation to establish a University Medical Clinic, with laboratories at the Royal Victoria Hospital; the other a gift from interested Governors of the Montreal General Hospital, enabling the erection of a metabolic and a pathological laboratory, under the charge respectively of Prof. Rabinowitch and Prof. Rhea.

Prof. Meakins, Director of the University Clinic, decided some years ago on the policy of concentration along certain broad lines of medical investigation, which, with their results, may be briefly stated as follows:

1. The Investigation of Normal and Abnormal Glycogen and Lactic Acid Metabolism (with Drs. Long and Brow, Miss R. Grant, Mr. F. Horsfall and Mr. G. Evans).
   Various publications were produced dealing with physical and chemical changes in health and disease.
   Investigations on the connections of the sympathetic nervous system with higher centres seated in the mid-brain. This involved physiological, anatomical, and clinical observations, all of which have been published.
2. On the Pathological Physiology of Respiration and Circulation (with Drs. Long, Brow, Eakin, Marshall, Christie, Paterson, and others).
3. Study of Calcium Metabolism in diseases of adults with special reference to nephrosis and diseases of the bone (with Prof. Sclater Lewis and Dr. W. Scriver)—five publications.
4. Special studies of Metabolism and the Ductless Glands (with Dr. Mason)—fifteen papers.
5. Calcium Metabolism in relation to pediatrics (with Drs. Graham Ross and Jessie Scriver).
6. An outstanding piece of work, and most favourably reviewed in England and America, was done in connection with Icterus Neonatorum and other studies on changes in the Reticulo-endothelium by Dr. Gottlieb, in association with Drs. Goldbloom, J. Kaufmann, and P. J. Kearns.

In the clinical laboratory at the Montreal General Hospital, under Dr. Rabinowitch, 90 publications have appeared during ten years, dealing with the physical and chemical changes in health and disease. Among these are noted his articles on High Carbohydrate low caloric diets in Diabetes, and one on Diabetes and the calloidal osmotic pressure of the blood. While the publications from this laboratory have dealt more particularly with diabetes, on which the Director is an outstanding authority, other original investigations deal with the parathyroid gland, the gall bladder, and diseases of the kidney and liver. Ten other papers on similar subjects are in press.

Dr. C. P. Howard, who is in charge of the medical service, is writing a monograph on pneumonia for the Oxford series. A new haematological clinic has been established under Dr. E. S. Mills, who has studied (1) The treatment of Idiopathic Anaemia with iron and copper, and (2) Aplastic Anaemia.

Pediatrics: (Prof. Cushing). His recent contribution to the Symposium at the British Medical Association on Poliomyelitis received most favourable comment.

Important studies are:—

Drs. Goldbloom and Brodie (co-operating with the Department of Medicine) on the Active Immunity against Poliomyelitis. Dr. W. Scriver on Anaemia (see Pathology). Drs. Goldbloom and Gottlieb on Icterus Neonatorum (V. antea).

Drs. Wright and Geddes in the Foundling Hospital have been studying the feeding of infants according to appetites.

Dr. Goldbloom's book on the "Care of the Child" has appeared in various languages, and has attained a wide circulation.

Psychology: An outstanding text-book for doctors and students of psychology and psychiatry has been published by Prof. J. W. Bridges entitled—"Psychology, normal and abnormal—for the use of medical students," while Mrs. K. M. Bridges has another volume in press on "The Emotional Factors of Childhood," one of a series of classics on psychology published in England.

Psychiatry: Prof. David Slight has been conducting a series of interesting investigations on the following:—

1. The blood fats in normals and certain cases of mental disorder.
2. Experimental investigations on sleep.
3. The psychological factors in selected forms of neuroses.
4. On the teaching of psychiatry.

Neurology and Neurosurgery: These departments have now been combined under the chairmanship of Dr. Wilder G. Penfield, have their own special and very active laboratories for neuropathology, and have produced many articles of interest and value.

Dr. Penfield and his staff are at the moment chiefly interested in the pathology and treatment of epilepsy.

Recent work includes:

A study of Experimental Epilepsy (Dr. J. P. Evans).

The effects upon Experimental Epilepsy in Animals, of the removal of various portions of the Sympathetic Nervous System (Dr. Gage).

The Origin of the Perivascular Nerves of the Brain (Dr. Chorobski).

Prof. W. V. Cone has presented a study of the relationship of the aseptic embolism to histological changes in the brain and the cellular change in the spinal fluid.

Dr. Colin Russel is at work on the relationship of congenital defects in the cerebral blood vessels to subarachnoid haemorrhage, and has also made moving picture studies of clinical cases.



DR. WILDER G. PENFIELD

Dr. Penfield, a graduate of Princeton, Johns Hopkins, and Oxford Universities, a Rhodes Scholar, and a former holder of the Beit Fellowship in London, was Associate Surgeon of the Presbyterian Hospital, New York, and Associate Professor of Surgery at Columbia University. An internationally recognized leader in neurological surgery, he is now Clinical Professor of Neurology and Neuro-Surgery at McGill.

Surgery: A great impetus to surgical research has been given within the last two years through the Rockefeller grant of $85,000 for Experimental Surgery. Under the direction of Professor E. W. Archibald many problems have been studied:—

1. On the Aetiology of Acute and Chronic Cholecystitis (Dr. A. Wilkie).
2. On Cholesterosis (Wilkie).
3. The Stimulation of Bone Production (Dr. D. Ross.
4. The Strengthening of Bone by Muscle Implantation (Ross).
5. The Prevention of Peritoneal Adhesions by Turtle Bile (Dr. M. Kaufmann).
6. On the Possibilities of Regurgitation of Fluids from the Duodenum into the Common Bile and Pancreatic Ducts (Kaufmann).
7. On the Cure of Penetrating Gastric Ulcers (Dr. J. Armour).
8. A new method of studying Gastric Secretion with special Pouches — a matter of great importance in physiology (Armour).
9. Experimental studies on the Cause of Death in High Intestinal Obstruction (Armour).
10. On High Intestinal Obstruction (Dr. Gavin Miller).
11. Lesions of the Lung resulting from Infection with the Tubercle Bacillus and Aspergillus (Dr. Bethune).

At the Montreal General Hospital, Professor A. T. Bazin has written on "The Benign Papilloma of the Common Duct" and on "The Surgical Problems in Diabetics."

The excellent volume recently published by Dr. Eberts (with the collaboration of Fitzgerald and Silver) on "Surgical Diseases of the Thyroid Gland" is one of the most important surgical works of the year. The commendatory reviews in America and England speak volumes for its success.

Other publications of interest are:—

Dr. Fraser Gurd—(1) The Treatment of Fractures involving the Ankle Joint; (2) Modern Methods in the Treatment of Carcinoma; (3) Appendectomy and the Prevention of Wound Infections.

Dr. L. H. McKim—Conservatism in the Treatment of Infective Bone Lesions of the Fingers.

Dr. P. G. Silver—Intestinal Obstruction.

Dr. C. K. P. Henry—Goitre and its Relation to Industry.

Dr. E. H. Cayford—Traumatic Aneurysm of the Subclavian Artery from Fractured Clavicle.

Orthopaedics: Under the direction of Dr. W. G. Turner, at the Royal Victoria Hospital and the Shriners' Hospital, where abundant material for investigation is found, the following problems have been investigated:

On the closed and open reduction of congenital hips; on the treatment of Pott's disease; on the treatment of scoliosis; on extra-articular ankylosing of the hip; on deformities of infantile paralysis, and on the lengthening of shortened limbs. Further investigation is in progress in reference to the maggot treatment of osteomyelitis.

At the Montreal General Hospital, under Dr. Nutter and his staff, special interest has been taken in sciatica and its etiology at the fifth lumbar nerve root; on the treatment of tuberculosis in knee joints; on the new form of bone graft operations by bone pegs; on arthrodesis, and on colonic stasis in chronic arthritis.

Urology: This service affords splendid opportunities for post-graduate study and practice.

Under Dr. D. W. MacKenzie, (R.V.H.) and Dr. F. S. Patch (M.G.H.) a great deal of original clinical, pathological, and chemical work has been done.

Among the more interesting contributions by Dr. Patch are as follows:—

1. Conservative Plastic Surgery in the Treatment of Hydronephrosis associated with Aberrant Vessels.
2. On the Pathogenesis of Bleeding in Tumors of the Kidney (in association with Prof. Rhea).
3. A statistical analysis of five thousand observations in Renal Disease as to the Urea and Creatinine Contents of the Blood.
4. Birth Traumatism as a factor in Urinary Infection, with suggestions as to Treatment.
5. The Association between Leukoplakia and Squamouscell Carcinoma in the Upper Urinary Tract.
6. Granuloma Inguinale: its presence in Canada.
7. A Giant Ureteral Calculus.
8. Granuloma of the Ureter.

Among Dr. D. W. MacKenzie's contributions are some of special interest and value:—

1. Perirenal Haematoma, Primary with Polycythemia.
2. Pathology and Prognosis in Tumors of Testis.
3. Tumors of the Testis.

And from Dr. M. I. Seng "The Blood Pressure in Prostatism," and Dr. N. E. Berry articles on Hypopituitarism, and on Traumatic Rupture of the Bladder and Urethra.

Ophthalmology: (Prof. Byers). This department has an almost unique record in America, having continuously studied the pathology of the eye for 35 years, and collected and classified the abundant material for teaching and research. Among many papers are:—

1. On the distribution of Inflammatory Cells in Endophthalmitis, as illustrated from 70 cases—in progress (J. MacMillan).
2. On the cytology of the optic nerve (Cone and MacMillan).

Prof. Mathewson, at the General Hospital:—

1. On Megalocornea.
2. Primary Tumors of the Optic Nerve.

Dr. McKee has continued his study of, and publication on, the diphtheria conjunctivae, on diseases of the conjunctiva and on the practical application of bacteriology to clinical ophthalmology.

Otolaryngology: Dr. Ballon has published two reports dealing with bronchoscopic practice:—

1. A Molar Tooth in the Left Lower Bronchus.
2. A Fish Bone in the Trachea of a Sixteen Months' Old Child.

and Dr. McNally has two papers—

1. A Check Mechanism in the Frog's Labyrinth.
2. Recent Advances in the Physiology of Hearing.

Dermatology: At the Montreal General Hospital, Dr. Burgess has contributed:—

1. Studies on the Hypersensitiveness of the Skin to Quinine.
2. The Importance of Eczema in relation to Alcholic Lotions (with Dr. Usher).
3. The Use of Quassin as a Denaturant for Skin Lotions.

All of these studies have proven of a very definite industrial value.

Gynaecology and Obstetrics: The magnificent new Women's Pavilion adjacent to the University (200 beds) has not only a laboratory of its own but operates in close cooperation with the R.V.H. and M.G.H.

The following is a list of some of the recent publications:—

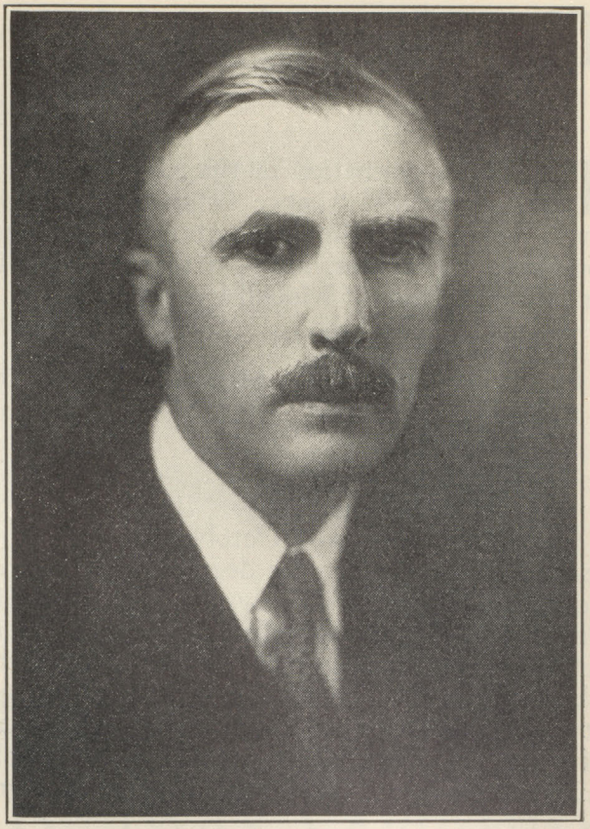
Prof. J. R. Fraser—Placenta Praevia.

Prof. H. M. Little—On the Treatment of Salpingitis by Local Injections of Turpentine.

Prof. Goodall on (1) The Pathology of Cervical Ectropion, (2) Meconium in Vertex Presentations, (3) Ovarian Pregnancy (with Dr. Kearns), (4) Puerperal Infections, (5) Toxaemias of Pregnancy, (6) Hydramnios, in theory and argument, (7) Hydrorrhea Gravidarum, (8) Diseases of the Tubes and Ovaries. Prof. J. W. Duncan (1) The "Radical" in Obstetrics, and (2) Contracted Pelves and Disproportion.

Dr. A. D. Campbell (1) on the Clinical Use of the Ovary Stimulating Hormone of the Placenta, and (2) Notes on the Clinical Use of certain Placental Extracts (with Prof. Collip).

Dr. P. J. Kearns—(1) A Case of Sarcoma Botryoides Corporis Uteri, and (2) Use of Sistomensin.



B. P. BABKIN, M.D., D.Sc.

Dr. Babkin, Research Professor of Physiology at McGill, whose studies of the secretory and motor functions and mechanism of the digestive tract are producing results of deep interest and great clinical value.

Dr. L. S. McGoogan—Contracted Pelves and Disproportion.

Dr. Eleanor Percival—Fibromyoma of the Fallopian Tube with Tuberculosis, and a Historial article on "Women in Medicine."

Public Health and Preventive Medicine: (Prof. Grant Fleming). The publications are chiefly of the nature of health surveys—booklets on health for the community—articles on health problems for the profession—all of national value in the way of conservation.

Industrial Medicine: Prof. F. G. Pedley has made two interesting studies:—

1. The effects of lead on vision.
2. The hazards of asbestos mining and milling.

A survey of Tuberculosis among industrial workers is in progress.

History of Medicine: Dr. Maude Abbott has just completed a most important and illuminating monograph entitled "Medicine and Surgery in the Province of Quebec." This article of 100 pages, with 35 illustrations, will appear in the volumes entitled "The Storied Province of Quebec."

The Household Science Graduates' Society

By Elsie G. Watt

THE recent formation of the McGill University Household Science Graduates' Society, seven years after the first group of students completed the course, marks a step forward in Household Science at McGill University.

The officers of the Society are as follows:

President—Mrs. E. R. Alexander, B.H.S. '26.
Recording Secretary — Mrs. H. Costigan, B.H.S. '23.
Corresponding Secretary-Treasurer — Miss Jean Kyle, B.H.S. '28.

Over eleven years ago (October 1919) the four-year course, leading to the degree of Bachelor of Household Science (B.H.S.), was started at McGill University. This course comprised two years in Arts or Arts-Science, specially outlined, to be taken at McGill or any other recognized university; with the third and fourth years at Macdonald College, which houses the Household Science School, as well as the Faculty of Agriculture of McGill University. This has since been changed, however, so that one year may be taken at McGill or other university, and the remaining three at Macdonald College; or all four years may be taken at Macdonald College.

The name "Household Science" seems to convey to the average mind that such a course would have a very limited scope. The following statistics are given with the hope of changing this belief, and of giving some idea of the very broad education and training which this course offers. At the same time, they will answer the frequently-asked question—"Does it take four years to learn how to cook?"

Household Science Course:

Percentage of hours devoted to:

Pure Science: Maximum 53
Minimum 45
General Education: Maximum 23
Minimum 20
Household subjects: Maximum 24
Minimum 21

Pure Science subjects include: Chemistry (55% of total), zoology, physiology, bacteriology, physics, dietetics, diet therapy (optional), botany (optional).

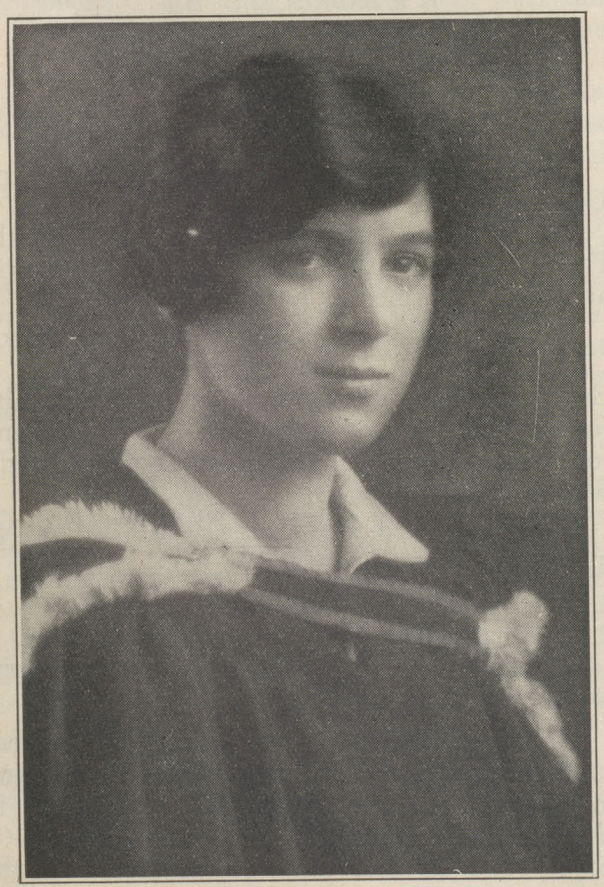
Educational subjects are: Mathematics, English, economics, art, education, theory of teaching, German or French (optional).

Household Science Subjects are: Textiles and clothing, dietetics (practical), foods and cookery, household administration, institution administration, demonstrations.

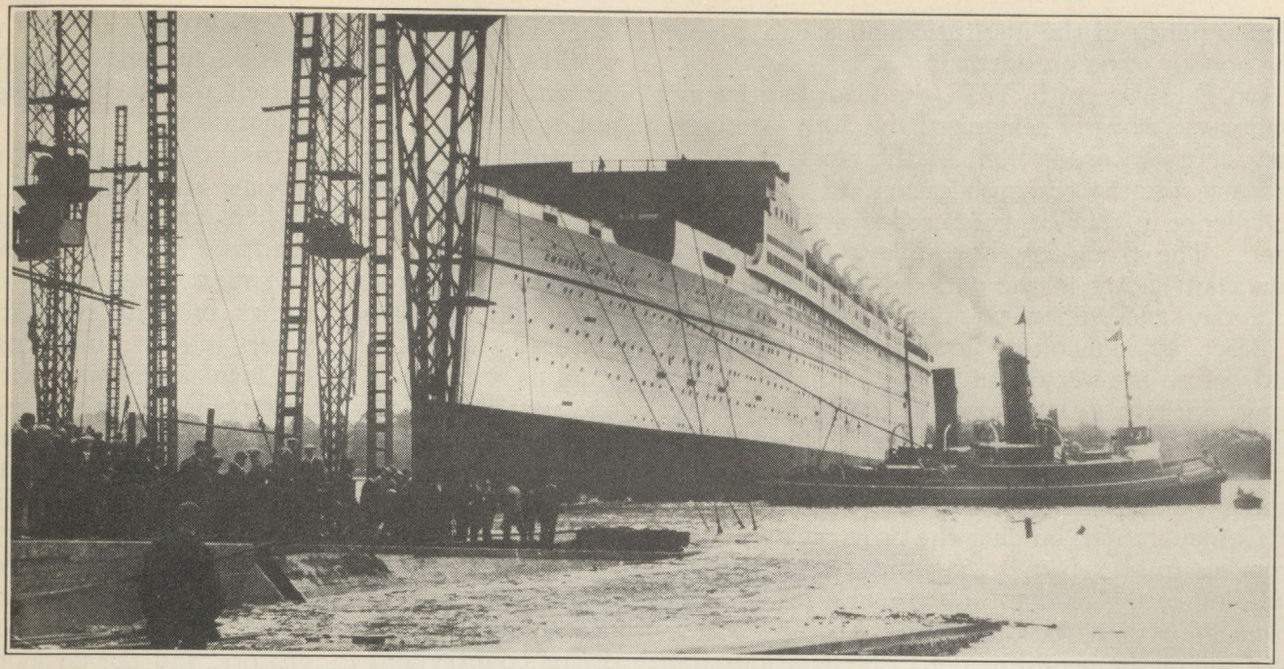
Optional: Extra textiles and clothing, diet therapy, teaching practice.

The four-year course is of interest, not only to those in the vicinity of Montreal, but from the East to the West of Canada. Even the first graduating class consisted of two young women from McGill University, one from the University of British Columbia, and one from the University of New Brunswick. The total number of graduates is thirty-four. Of these, seventeen completed their first two years at McGill University, six at the University of British Columbia, three at Queen's University, two at the University of New Brunswick, two at Acadia University, one at Dalhousie University, one at Toronto University, one at Bishop's College, and one at Western University. Four of these had already received the degree of Bachelor of Arts, and one the degree of Master of Arts.

(Continued on Page 68)



MRS. E. R. ALEXANDER, B.H.S. '26
The first President of the newly-formed McGill University Household Science Graduates' Society.



LAUNCHING THE "EMPRESS OF BRITAIN"
This 42,500-ton ship will join the Atlantic Fleet of the C.P.R. this summer. Her speed of 24 knots at sea will make the finest liners on the Atlantic look carefully to their laurels.

The Canadian Pacific Railway Company 1881—1931

By Edward W. Beatty

STANDING just inside the doorway of 1931, a year which will demand much of us and to which we all look for much, it is only natural that we should take stock of our surroundings and of ourselves. This is a proceeding which invariably calls for a goodly portion of plain courage, and a degree of frankness which precludes anything in the nature of camouflage or "window-dressing."

I may, perhaps, be forgiven for saying that these characteristics become even more essential, when the medium of conducting the examination and assessing the result is a publication, such as *The McGill News*, most of whose readers are among the ranks of those in professional and business life, and are, therefore, more than usually concerned in the charting of the waters in which they must navigate.

To say that 1930 was anything but a very difficult and disappointing year would be manifestly unjust. Depression and the satellite scourge of unemployment have made themselves felt from one end of the country to the other, and conditions in other lands have not been such as to offer much consolation. These things are facts, which must be faced.

It is none the less true, however, and none the less proven, that these very circumstances are contributory to our right, as Canadians, to look with confidence to the future. No people, which can face adversity as Canadians have done, has any cause to fear whatever destiny may decree. A decade and a half ago, Canada proved its mettle in war; it is now doing so again in the struggles incident to peace-time adversity.

To-day, we may claim, without boasting, that the common effort is being bent to the solution of our immediate problems, in the light of our just and reasonable confidence in ourselves and our future. There exists a growing feeling throughout the country that the turn of the tide is at hand, if indeed it has not already begun, and men and women in all strata of society are learning to pull their weight in the boat which is to take us over the bar and into the broad waters of normalcy and renewed progress.

It is no intention of mine to preach. I have already committed myself to plain-speaking; and if I claim that Canada today has good reason for hopefulness of the days to come, I do so backed by the knowledge of the experience and con-

tinued policy of the institution of which I have the honour to be president.

On February 16th, 1931, the Canadian Pacific Railway Company celebrated the 50th Anniversary of its incorporation, at the close of half a century of the exemplification of just such confidence in Canada as is needed at the present time. The Company has always been a very important factor in the national life. It remains so to-day; and will continue to be so in the future.

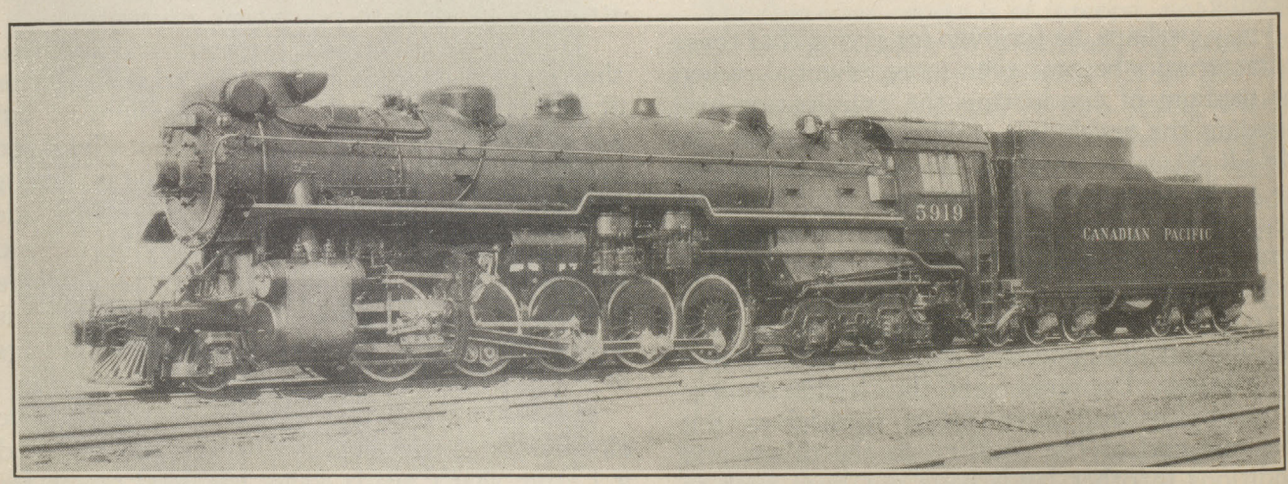
Beset by difficulties and discouragement at and before the very hour of its birth, the Company, with its eyes always on the future of the Dominion, fought its battles against physical and other obstacles, overcame them with men and money, and established itself as the great girdle of Confederation, binding the provinces together from sea to sea. It must be remembered that the building of the road to link the Prairies and the Pacific Coast with Upper and Lower Canada was one of the conditions of Confederation; and the driving of the last spike at Craigellachie, B.C., in 1885, by Donald Smith (afterwards Lord Strathcona) was no less a national event than the signing of the pact of Confederation itself.

The courage and convictions of the founders of the Corporation may well be said to have become part of the very marrow of its structure, and we are proud to feel that, year after year, in good times and bad, the same conservative confidence has been preserved and reflected in a fixed determination to contribute to the country's development, unswerved by passing phases of trade recession and national emergency.

Constant faith in Canada's future has been the core of the Canadian Pacific's policy, leading to the steady extension of its services on land and sea. Today, it proudly claims the title of the world's greatest transportation system. It might be pardoned if it called itself Canada's greatest public servant, a proud title indeed.

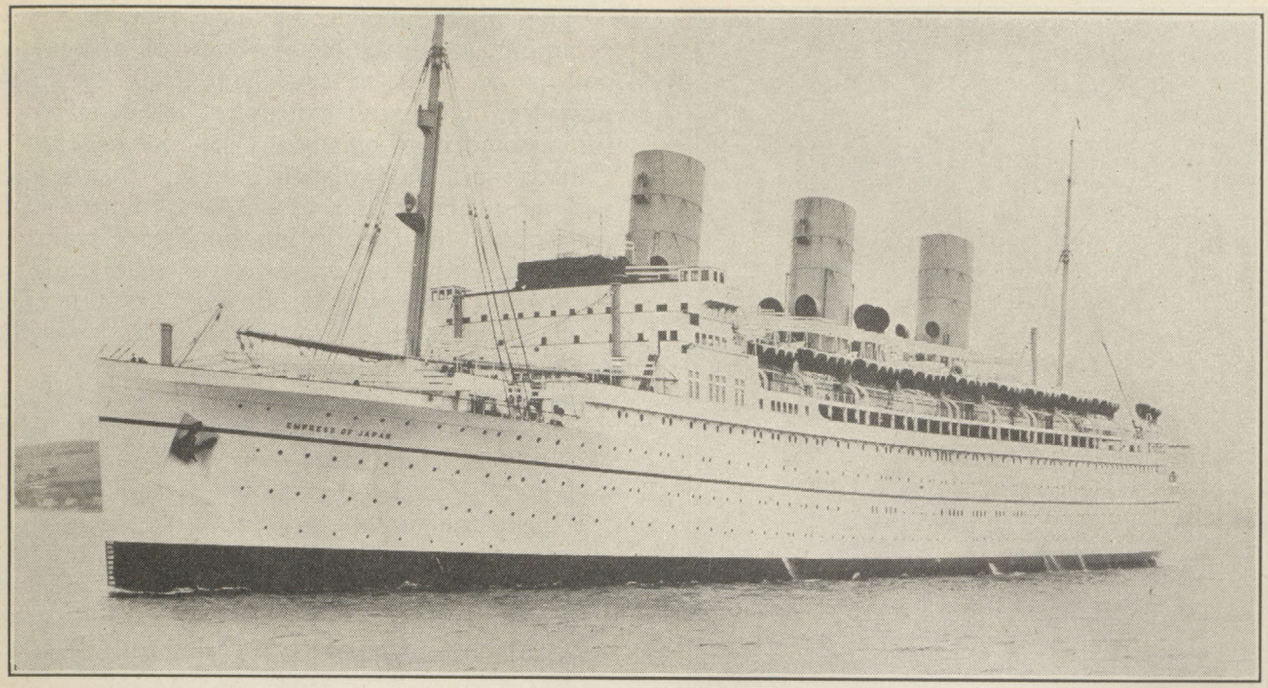
Contributing steadily to the increase of the country's trade, both at home and abroad, it is ready to bear its share when commerce regains its much-desired normal and, we hope, increasing volume. A carefully planned programme of branch-line construction has brought the agricultural areas of the West and the industrial sections of Central Canada into closer touch with one another, and with their respective marketing channels. Research in rolling-stock has been recruited to the service of the public in up-to-date transportation equipment, while modern traffic methods, the result of years of study and experiment by operating experts, have brought travel to its high present-day standards. A chain of hotels from Atlantic to Pacific is at the service of the country and its visitors, and the development of summer and winter resorts has helped to make the tourist trade one of the Dominion's great sources of revenue. Fleets on the Atlantic and Pacific have borne their share, both in passengers and freight, in maintaining contact for Canada with other countries.

In the space allotted me on this occasion, it is impossible to make more than passing reference to the other interests of the company; suffice to say, therefore, that it operates its own express and telegraph systems; is the second largest mining company in Canada; owns vast tracts of farmlands, developed and undeveloped in the West, in connection with which it operates experimental farms and a huge irrigation system, and also runs inland and coastal steamer services, including a line to Alaska.



5919

Twenty locomotives of this 2-10-4 type are now in the service of the Canadian Pacific Railway Company in the Rocky Mountains. Each possesses a tractive effort of 77,200 lbs. and can develop more than 4,200 horsepower.



THE "EMPRESS OF JAPAN"

This beautiful ship of 26,000 tons entered the trans-Pacific service in the summer of 1930, and now holds all records for eastward and westward crossings.

Up to now, I have generalized, and perhaps it may be well to quote one specific instance or phase of the development of this great concern, which has such boundless faith in Canada and its future.

Let us take Canadian Pacific Services on the high seas. It is, most probably, not generally appreciated that the Company owns more equivalent tonnage on the Atlantic than any company crossing it, not excepting those whose names, linked with great ships, have become household words in connection with the port of New York.

Since the close of the Great War, the Canadian Pacific has spent roughly $100,000,000 on the development of its ocean services. Last summer the 26,000-ton *Empress of Japan* entered the trans-Pacific trade, and speedily and permanently established herself as the best ship on that ocean, both in point of speed from Orient to Occident, and vice-versa, and also in regard to accommodation.

Next summer, the 42,500-ton *Empress of Britain* joins the trans-Atlantic fleet. She will speak for herself, but we may say, without anything approaching boastfulness, that she will be an important contender for the pennant of the North Atlantic, making the crossing to Quebec in about five days, which will give the fast liners into New York cause to look to their laurels.

In addition to her speed, which will be 24 knots at sea, this new ship will be the last word in luxury, accommodating less first-class passengers for her size than anything afloat. Space is being made the prime consideration throughout a series of suites; and all first-class rooms are "outside," with natural light and air, 75 per cent. of them being accommodated with baths.

The new White Empress, which is 730 feet in length, with a beam of 97½ feet, has excellent public rooms and spaces, and her full-size tennis court, swimming-bath, gymnasium, turkish bath, and electrical treatment room are specially designed for the comfort and convenience of her passengers, who will also find a ship-to-shore telephone beside every bed.

The Company is spending some $2,000,000 on a tunnel through the great rock on which Quebec City is built, to put the new ship, at her new berth in Wolfe's Cove, in direct communication with the main line of the railway, without having to run trains through the local terminals and harbour lines. The class of traffic which this new luxury liner will attract to Canada and, potentially, through it for travel to the Orient, on the *Empress of Japan*, will be a factor, both in the development of Canada and in the linking up of the Empire by means of intra-Empire communications.

And, speaking of the Empire at its very heart—the great metropolis of London—the very hub of its fashionable West End will shortly become the site of the Company's newest and most



Associated Screen News

EDWARD W. BEATTY, K.C.
President of the Canadian Pacific Railway Company and Chancellor of McGill University.

up-to-date hotel, a large frontage on Berkeley Square and Bruton Street having been acquired for this purpose.

The Company has also been responsible recently for important developments in motive power equipment, the latest product of our locomotive designing department being the type of engine known as the "5900" or "T-1 Class." Each of these engines does the work of two or more of the lighter locomotives in use on the railway and releases for service elsewhere on the Company's lines considerable motive power equipment. They are technically known as the 2-10-4 type—that is, two wheels on the leading truck, ten 63-inch drivers, and four wheels on the trailing truck. Each engine and tender over all measures 98 feet, and weighs 750,000 lbs., eighty times heavier than Stephenson's historic "Rocket." Each possesses a tractive effort of 77,200 lbs., and will be able to develop over 4,200 horsepower, or about 85 times as much as did Stephenson's "Rocket," while their capital cost was about 45 times as great. The cylinders are 25½ inches in diameter, and the stroke 32 inches.

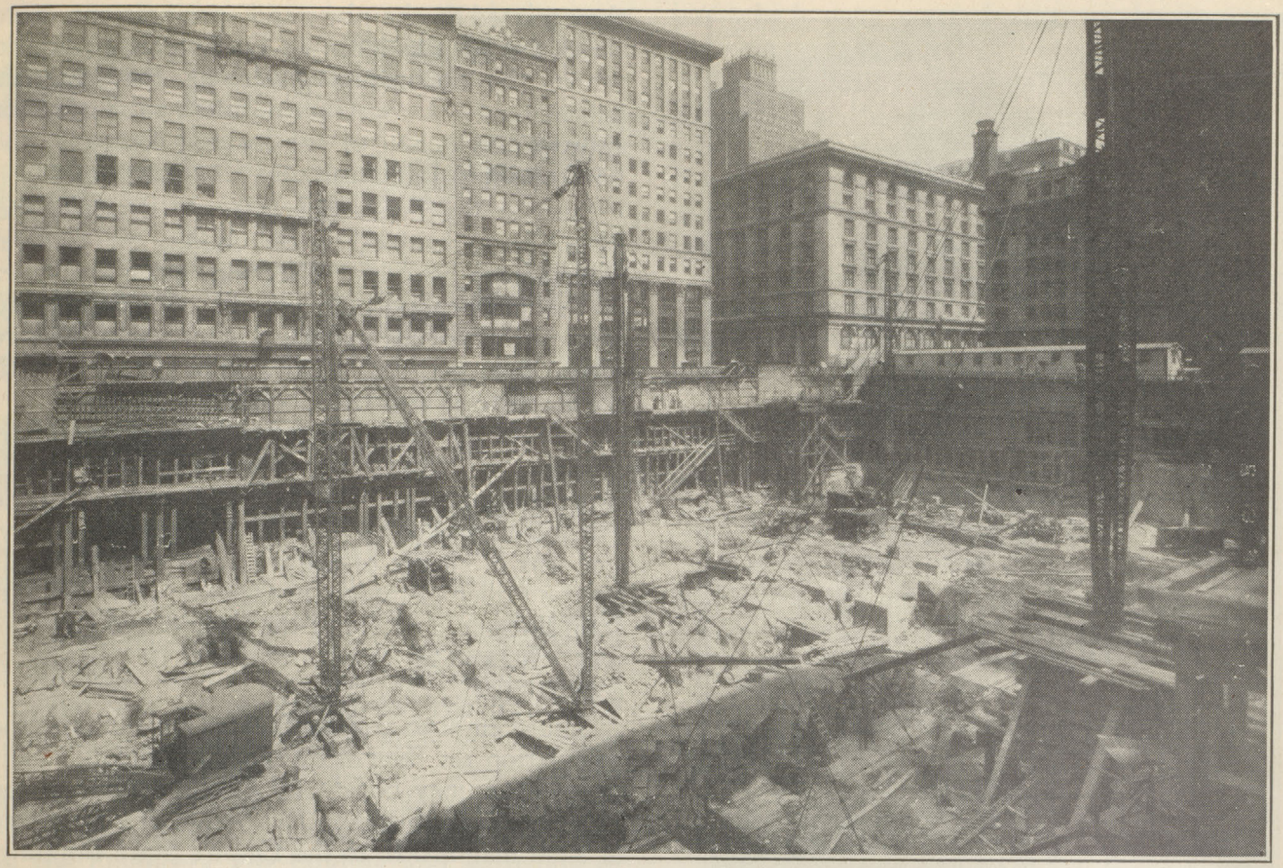
The oil-fired boiler contains over two miles of piping, is constructed wholly of nickel steel, and is designed to withstand 280 lbs. boiler pressure. They are the heaviest and most powerful locomotives of this type constructed in Canada and, as far as is known, the heaviest and most powerful two-cylinder engines so far constructed in the British Empire. Twenty of these are now in operation in the Canadian Rockies. They were conceived, experimented with, and designed by the Motive Power Department of the Canadian Pacific Railway.

With such tangible proofs of unshaken confidence, may not all Canadians, from the Maritimes to the Pacific, set their faces to the future and their shoulders to the wheel in sincere profession of their own ability to clear the pathway to better days. The thought is good; but it is only so insofar as it generates effort by one and all to attain the common end—success for Canada and, thereby, increased prosperity for all.

H. M. MacKay Memorial Scholarships

PLANS are under way for the establishment of a memorial to the late Dr. Henry Martyn MacKay, Dean of the Faculty of Applied Science, McGill University, who died on October 25th last. Arrangements are in the hands of a committee, under the chairmanship of Professor Ernest Brown and including Dr. D. A. Murray, J. Colin Kemp, G. McL. Pitts, W. E. Cushing, W. Taylor Bailey, Professors C. M. McKergow, R. DeL. French, and R. E. Jamieson, and Homer M. Jaquays, Honorary Treasurer. A memorial in the form of undergraduate scholarships in the Faculty of Applied Science has been decided upon, and the Committee hopes to secure funds to endow two or more such scholarships. It is estimated that a minimum sum of $10,000 will be required, and it is expected that at least one of these scholarships will be available at the opening of the session next October.

The Committee is anxious that the fund shall be representative of the large body of friends of the late Dean, and it is hoped that this notice may reach many of those whose addresses are unknown. Subscriptions should be made payable to "H. M. MacKay Memorial Fund," and forwarded to Room 71, Engineering Building, McGill University, Montreal.



MARCH 31, 1930

Excavation for the Empire State Building with most of the concrete column footings in place, ready for grillages and billets. The amazing speed with which erection of the building followed is revealed in the text of Mr. Dowswell's article and by the photographs on the following pages.

The Empire State Building, New York

By H. R. Dowswell

IT was my privilege in November of 1930 to tell the story of the Empire State Building to the New York Society of McGill Graduates. This building, the highest structure man has so far erected, was of interest to the McGill men of New York, because many of them have watched it take form from day to day more rapidly than any structure previously erected in this city, where "speed" in building is a slogan; in fact, the Empire State Building has been erected more rapidly than any building of its size anywhere in the world. A second reason for their interest may be explained by the fact that I, a McGill graduate in Architecture, have had, through my association with the Architects—Shreve, Lamb & Harmon—a measure of responsibility in its development and construction.

The suggestion was made that an article, dealing with the problems involved and their solution, would be of interest to McGill graduates generally, even though only a small proportion of them may be directly interested in building design and construction. I shall, therefore, endeavour to give the story in non-technical terms, and refer those graduates who are interested in the technical details to the series of articles in the *Architectural Forum*, beginning in the June, 1930, issue, and continuing in succeeding numbers.

The Empire State Building, which will be substantially completed when this issue of *The McGill News* reaches you, has been erected on the sites of the old Waldorf Astoria Hotel, the Astor Court, and the Astor Court Building, a plot measuring 200 feet on the west side of Fifth Avenue, and extending westward for 425



JULY 31, 1930

Four months from the date of the first photograph of our series, steel was up to the 47th storey, masonry to the 30th storey, and the chrome steel window trim to approximately the 38th storey.

feet along both 34th and 33rd Streets. This property was acquired by Empire State, Incorporated, a company having former Governor Alfred E. Smith, of New York State, as President, and Mr. Robert C. Brown as Vice-President and Executive Director.

The Architects were selected toward the latter part of September, 1929, and they, in turn, with the approval of the Owners, selected the following Consulting Engineers:—Homer G. Balcom, for the design of the structural steel and foundations; Meyer, Strong & Jones, Incorporated, for the heating and ventilating, electrical work, and the elevators; and F. J. Brutschy for the plumbing.

The interests of the Mortgagee, insofar as they related to the plans and specifications, were cared for by the office of D. Everett Waid, to whom the documents governing the materials and methods of construction were submitted for approval on behalf of the loaning company, the Metropolitan Life Insurance Company.

Starrett Brothers—now Starrett Brothers and Eken, Incorporated, were chosen as General Contractors by direct selection, after a number of the more important general contractors had been interviewed by the Directors of Empire State, Incorporated, sitting in conference with the Architects and the Company's lawyers.

It may be of interest to record that Mr. Andrew J. Eken, Vice-President of Starrett Brothers and Eken, was for many years with the Canadian office of the George A. Fuller Company, and was in charge of many large structures built by the Fuller Company in Canada; also that Mr. John Bowser, a native of the Province of Ontario, was chosen as Superintendent in charge of construction.

Those embryo architects, who are building the foundation for their life's work in McGill's halls of learning, may benefit by a brief outline of the Architect's problems in the design of a structure of such magnitude as the Empire State Building.

The legendary Architect, in whom centred all wisdom and authority, has passed into history. The Architect is still the leader in his art and the co-ordinator of constructive forces, but where so many interests must be considered—interests which lie far beyond the knowledge and scope of any one profession or group, the Architect must function as part of an organization, not as a despot.

In the development and construction of any large modern business building, problems arise which, if undertaken by the Architect's office, would involve a duplication of effort and a loss of time too costly to be considered, even assuming that the necessary ability, experience, and organization could be brought within the scope of a single professional unit. The use to be made of the structure, the character of the space which can be leased in a particular locality, and the time at which such space should be ready for occupancy, all affect the success of the project and should all be determined by the owner, with the co-operation of his rental, management, and operating staffs.

It is only through a most thorough study of these problems that a successful solution can be obtained, and then the program, as to time of completion, must be checked and verified beyond question, and a definite schedule set up. At this

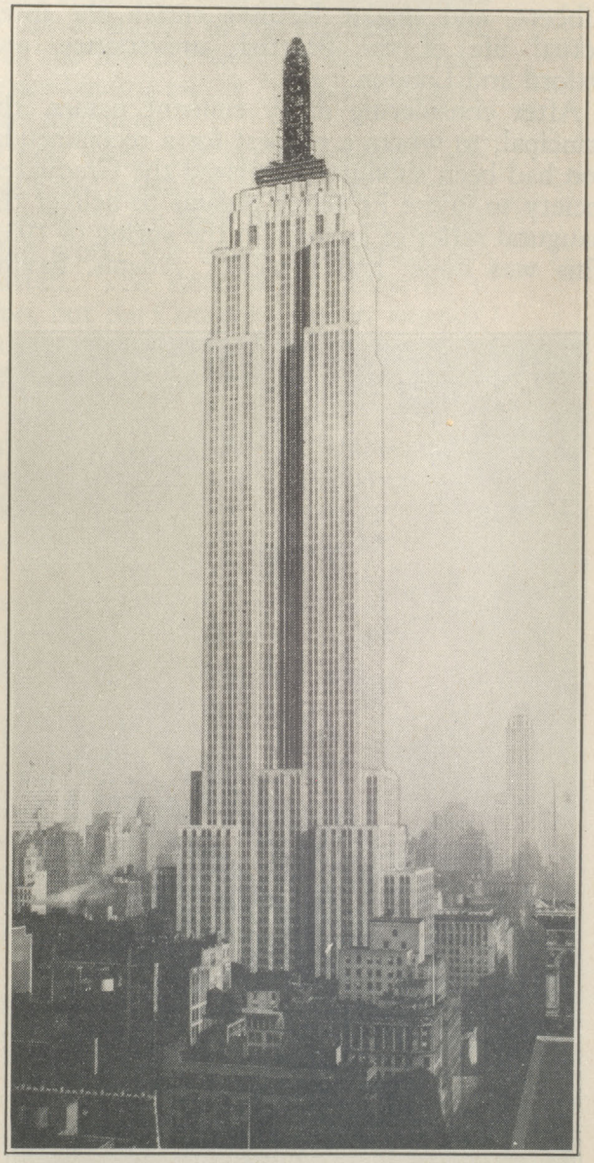
point the Builder must be consulted, because only the Builder can state whether the construction program can be carried through. It is obvious, then, that the selection of a Contractor cannot await the completion of drawings and specifications, but that the Builder must, from the early stages, form part of the organization upon whom rests the responsibility for the success of the undertaking. Such an organization was set up for the Empire State Building, the Owners and their rental, management, and operating manager; the Architects and their Consulting Engineers; the Builder; and later, as the work progressed, representatives of the various sub-contractors executing work in the different trade divisions.

The first general meeting was held in November, 1929, when preliminary sketches for the building were being set up. These meetings were continued regularly throughout the entire period of construction. At this time, demolition of buildings on the site was proceeding, and a program was set up calling for the placing of foundations in February, 1930, and the commencement of steel erection in March. Four months only was allowed for the completion of studies by the Architects, the preparation of steel designs by the Engineers, the bidding and awarding of contract for the steel, and the fabrication, delivery and placing of the first structural members. Some idea of the magnitude of the undertaking may be had, when it is considered that this building was being designed to produce practically two million feet of usable floor area, with a content of approximately 37,000,000 cubic feet, and required 58,000 tons of structural steel, all of which had to be designed, erected, and completed ready for occupancy before May 1st, 1931, less than fifteen months from the start of foundations.

Before information could be released to the Engineers for the design of the structural frame and foundations, two major problems had to be studied and solved; 1st, the application of the Zoning law, and 2nd, the vertical transportation —i.e., the number, size, speed, and run of the elevators. The Zoning law determines the gross area of the various floors below the tower. New York City is divided into districts, which, in turn, limit the use and height of the buildings within them. The regulations as to use fix the kind of business which may be carried on, and this, of course, determines the character of the occupancy of the building; the height limitations are stated in terms of street widths, with excess allowances accruing from buildings adjacent to or facing upon the same streets within the dimensions of the property to be built upon, but which were erected prior to the passing of the Zoning law.

The application of the Zoning law permits a building at the street lines to rise vertically to a height which is a ratio of the street width, and from this level requires that it be stepped back until the gross building area has been reduced one-quarter the area of the plot. When this area is reached, which is known as the tower area, the limit of height is determined only by economic, structural, and mechanical requirements.

(*Continued on Page 69*)



JANUARY 13, 1931

The Empire State Building, minus the aluminum covering of the mooring mast. This has since been placed in position, and the building, substantially completed, was ready for occupancy on March 1st, less than eleven months from the setting of the first structural steel.

The McGill Graduates' Lectureship

ALMOST simultaneously with the appearance of this issue of the *News*, the first address of the McGill Graduates' Lectureship series will be delivered in Moyse Hall, by W. G. S. Adams, Gladstone Professor of Political Theory and Institutions, Oxford University.

As readers of this magazine are aware, the Lectureship has been established with revenue from the Graduates' Endowment Fund, in the belief that the addresses would contribute to the life of the University an example of the finest scholarship, in the manner that the Gifford, Hibbert, and similar lectures enrich the intellectual life of the Scottish universities, and Oxford and London.

After considering many eminent names, the Principal, to whom a request for a recommendation had been submitted, advised the Graduates' Society to invite Professor Adams to deliver the inaugural series of lectures in the spring of 1931. This was done; and Professor Adams, having accepted the invitation, has announced that his subject will be "Aspects of Progress in the Twentieth Century." It has further been announced that the series of lectures would be given at 5 p.m. in Moyse Hall on the dates as shown below:

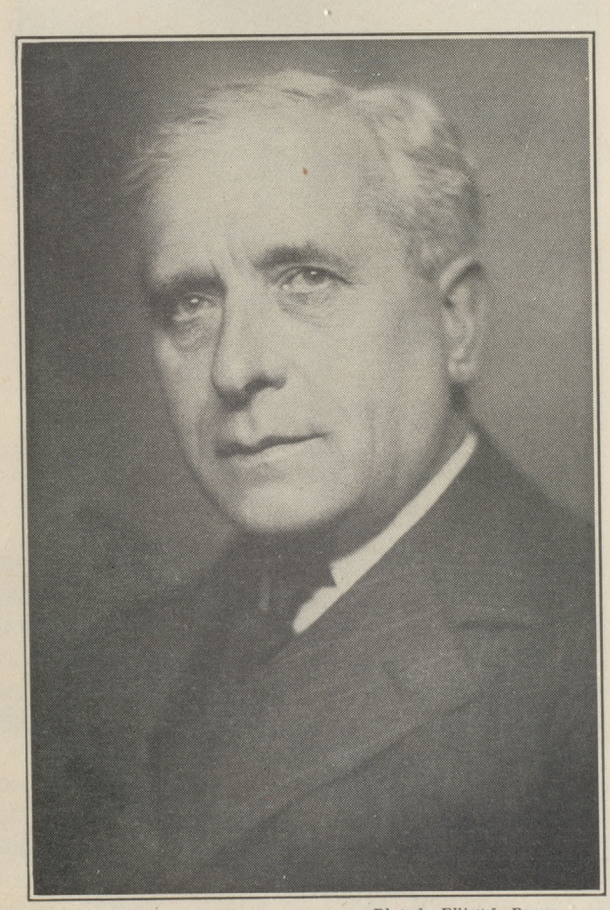


Photo by Elliott & Fry

W. G. S. ADAMS

Gladstone Professor of Political Theory and Institutions, All Souls' College, Oxford, who is delivering the inaugural series in the Graduates' Lectureship at McGill.

"Aspects of Progress in the Twentieth Century"

Thursday, March 12th
I. THE NEW ERA.

Tuesday, March 17th
II. THE RISE OF INTERNATIONALISM.

Thursday, March 19th
III. THE PROGRESS OF THE BRITISH COMMONWEALTH.

Tuesday, March 24th
IV. THE SPREAD OF DEMOCRACY—TRUSTEESHIP AND PARTNERSHIP.

Thursday, March 26th
V. THE RETURN OF NATIONALISM.

Tuesday, March 31st
VI. POLITICAL AND ECONOMIC RECONSTRUCTION.

Thursday, April 2nd
VII. THE SOCIAL SERVICES.

Tuesday, April 7th
VIII. COMMUNITY BUILDING.

Four informal meetings will also be held, one each week, on Fridays at 5 p.m., for discussion of questions arising out of the foregoing lectures.

Though it is not possible in the space available to give even an outline of Professor Adams's academic qualifications and distinguished career as a teacher and, equally markedly, as a man of action, it is clear from the long list of honours awarded to him, and the responsibilities entrusted to him at different times by the Government of the United Kingdom, the National Council of Social Service, Oxford University, Glasgow University, Harvard University, and many other bodies, that McGill is fortunate in his appointment. It is confidently believed that his coming will provide a stimulus in the intellectual life of the Dominion, and that the lectures he is to deliver will long be recalled by the University, its staff and graduates, as a series memorable for scholarly presentation, and, in a high degree, for applicability to the problems of life which are so markedly a feature of twentieth century existence.

The Lambeth Conference

By The Bishop of Montreal

IN responding to the request that I should write for *The McGill News* an article on the Lambeth Conference, with special reference to three subjects, I am presuming that it is desired that I should try to give the mind of Lambeth rather than my own.

The Status of the Conference

Lambeth is a purely voluntary Conference of Bishops who are in communion with the See of Canterbury, who meet on the invitation of the Archbishop of Canterbury to discuss subjects important to the life and work of the Church. It is in no sense a Synod; and its findings are not binding on the Anglican Church, though they possess a great moral force for her members.

The procedure is simple. During the first week, the various subjects are brought before the whole Conference by selected speakers, and as far as time permits, there is a general discussion. The subjects are then referred to special committees. After two weeks of committee work, the whole Conference re-assembles and discusses the Reports submitted. The Reports are "received"; they may be referred back for re-consideration, but the Conference never amends a Report. Each Committee is responsible for its own Report; the Conference is only responsible for the Resolutions. These Resolutions can only be fully understood, however, in the light of the Reports.

No part of the Church is bound by any Resolution of the Conference, until its own Synod has adopted it. Hence no Resolution of Lambeth is effective in any Ecclesiastical Province of Canada, until the Synod of that Province has adopted it. For instance, a recommendation, passed at the Conference of 1920, was adopted by the Provincial Synod of Ontario, but was rejected by the Provincial Synod of Canada (Quebec and the Maritime Provinces). Nor would it be effective throughout Canada, until our General Synod had accepted it. So that this particular finding of Lambeth is effective in Ontario, but not in Eastern Canada.

The Doctrine of God

Those who are familiar with the best thought in Anglican Theology, as it has developed during the last forty years, will find little that is new in the Lambeth Report on the Doctrine of God. It expresses what has been taught in the great centres of theological thought and preached in representative pulpits. So that every fairly instructed Anglican will feel as he reads it that it expresses what he believes; although he may not have formulated his belief, nor have seen it so succinctly stated.

This report is regarded as the ablest bit of work done by the Conference, and it will do much to stabilise the thought of many who are perplexed, and will create a bond of sympathy between the thinking laymen and their clergy, for it will show that we are thinking out together modern problems, and do not shrink from expressing our conclusions.

The Christian Church gave to the world a new conception of God in the Doctrine of the Trinity; and this the Conference fully accepts.

"The Christian Society had inherited from the Jewish Prophets belief in the one God—But, as its members reflected upon God's revelation of Himself in Jesus Christ and through the Holy Spirit, the doctrine of the Trinity gradually took shape. It was felt that the Divine Unity could not be expressed by an analogy derived from a single person. What we term personality in man must be included in God, but personality as we know it in man is not adequate to express fully the Divine nature. This thought comes very near to technical expression in the familiar words 'the Grace of the Lord Jesus Christ and the Love of God, and the Communion of the Holy Ghost be with you all.'" (P.69 Lambeth Report.)

Then the Doctrine of the Incarnation is stated as follows: "Only in the Doctrine of the Incarnation can the relation of Christ to God on the one hand, and His relation to man on the other, find their adequate expression. 'The Word (Logos) was made flesh and dwelt among us.' These words point to the attainment of the purpose of the whole cosmic process through the agency of the immanent Logos, or creative thought of God. They bring Christian theology into harmony with that modern view of the order of the universe which has been outlined in this report. They also indicate the appearance of the Logos in time, and the perfecting of humanity in Jesus Christ." (Lambeth Report P. 68.)

The Holy Spirit came at Pentecost as a new power to work in the lives of men. So that the old doctrine of the Trinity is accepted, but set forth in terms more familiar to the modern mind.

When we come to consider the method of God's work, we find a greater departure. Some critics have charged us with throwing over "fundamentalism." We can hardly throw over what we do not possess, for, as far as I know, the Church of England in her formularies and through her representative teachers (whatever individual members may have done), does not hold what we mean by "fundamentalism."

The Conference welcomes with thankfulness the aid of all channels through which is revealed the methods by which God works. I must quote this important passage at length:—

"Certain sciences, whose boundaries were for generations undeterminate, have in recent times united to give us a consentient view of the process by which the world as we know it has come into being. From this view has emerged an account of the order of creation upon which all instructed opinion is now agreed. Physics and astronomy, geology and biology, anthropology and archaeology unite to give us a description of the ordered sequence of creation. In view of this revelation, for such it truly is, the popular interpretation of the Biblical account of creation cannot be accepted literally; and it must be remembered that in great ages of constructive theology such a literal interpretation was not regarded as of primary importance. This new scientific conception, great and illuminating as it is, reveals the unity of creation and a progressive order. We find in the order thus disclosed plain evidence of an age long purpose which has culminated in the spiritual endow-

ments of man. We hold also, and we find our conviction shared by thinkers in many fields, that a truly creative process must be assumed, that this has been throughout continuous, and that it has involved the emergence of new qualities of being. We regard this creative process as not only spiritual in its results, but also spiritual in its origin."

The old materialistic conceptions of thirty years ago have been changed by more recent philosophies. Men realise that there is a creative activity, though some may ignore the power behind it. We feel assured that this power is God, and that as His creative activity has worked changes through the ages there have "emerged" in the process life, mind, man, Christ. Once we realise that God is the Source, and that He has been and is continuously carrying on His creative activity in the universe, and in and through the highest faculties of man, we will see that all knowledge is helpful to the right understanding of the Truth, and is a revelation from God, whether it comes through the prophet, the philosopher, or the scientist. God is still carrying on His creative work, and He may cause the emergence of still greater things. Seeing that God is the Power behind the changes, and is immanent in all His work, we realise that the nearer men get to Him the better will they understand Him, His work, and its great purpose.

The Being of God is most clearly expressed in the Life of Christ, and all those ideas of God which are inconsistent with the character of Jesus Christ are contrary to the character of God. What Christ is, God is. In the words of St. Paul, "We see God in the face of Jesus Christ." The great work of Christ is to bring man to know God by personal fellowship and experience.

While God is immanent, by His creative activity, in the universe and in man, "He is not to be identified with nature, nor in particular with man." To assume that man is Divine "must of necessity imply that evil exists in God. The result of God's creative activity must not be confused with His Being."

The approach to God is through Christ. By worship the spirit of man enters into communion with God, prayer being the beginning and the Eucharist the culmination; "realising that the barrier between man and God is finally removed by the sacrifice which the Eucharist commemorates." "The Church teaches that in the Eucharist the worshippers commemorate, present and claim their part in the Sacrifice made once for all upon the Cross." We worship the Father through the Son, by means of the Holy Spirit; and they who worship Him must worship Him in Spirit and in Truth.

Marriage and Sex

We sought to raise the whole question of sex to a high spiritual plane. The opening sentences of the Report give its key-note:

"Sex is a God-given factor in the life of mankind; its functions are therefore essentially noble and creative. Correspondingly great is the responsibility for the right use of them."

Again:

"Sex-life, we maintain, is a primary part of the process of soul-education by which we grow towards the fulfilment of God's intention for all His children."

With this ideal is contrasted that mere animalism which regards sex-life as "mainly physical and a means of self-indulgence and pleasure."

Race suicide, abortion, all irregular and illicit unions are strongly condemned

as utterly contrary to Christian morality. Emphasis is laid upon the necessity of education, and parents, clergy, and teachers are urged to train young people in regard to sex: "whether in plants, animals, or man, in its rightful setting as essentially a part of God's unceasing creative activity."

True marriage is set forth as the basis of family life, and parenthood as the paramount duty and glory of married life, to evade which must always be wrong, for in "the creation of a human soul, man and woman are in direct co-operation with God." This is an awe-inspiring and ennobling thought and raises marital intercourse to the highest spiritual level.

While the primary purpose of marriage is parenthood, it is not the only one. Resolution No. 13 says:

> "The Conference emphasizes the truth that the sexual instinct is a holy thing implanted by God in human nature. It acknowledges that intercourse between husband and wife as a consummation of marriage has a value of its own within that sacrament, and that thereby married love is enhanced and its character strengthened."

This aspect of married life seems to be ignored by many of our critics. It is very real, however, in the experience of human life. When a woman marries who is past age and there can be no hope of parenthood, this aspect of marriage is clearly recognized, and no one condemns it. If it be permitted to older people, it surely cannot be denied to the younger. Consequently, after setting forth the highest ideals of marriage and parenthood, the Report deals with this important aspect of the subject and says:

> "it will be admitted by all that there are circumstances in married life which justify and even demand the limitation of the family by *some* means. The Church is concerned with the moral principles which must govern such limitation. It can never be right for intercourse to take place which might lead to conception, where a birth would involve grave danger to health, even to the life of the mother, or would inflict upon the child to be born a life of suffering; or where the mother would be prematurely exhausted, and additional children would render her incapable of carrying out her duties to the existing family."

> Then the much discussed and condemned Resolution No. 15 sets forth that: "where there is a clearly moral obligation to limit or avoid parenthood, the method must be decided on Christian principles. The primary and obvious method is complete abstinence from intercourse (as far as may be necessary) in a life of discipline and self-control lived in the power of the Holy Spirit. Nevertheless, in those cases where there is a clearly felt moral obligation to limit or avoid parenthood, and where there is a morally sound reason for avoiding complete abstinence, the Conference agrees that other methods may be used, provided that this is done in the light of the same Christian principles. The Conference records its strong condemnation of the use of any methods of conception-control from motives of selfishness, luxury, or mere convenience."

It also condemns the practise of conception-control for social and economic conditions "which ought to be changed by the influence of Christian public opinion."

It cannot, I think, be truly said that the Conference has endorsed indiscriminate use of conception-control, race-suicide, etc., as many critics have charged. It was felt by many in the Conference that to insist upon abstinence as alone permissible under these special circumstances would deprive young couples of the help of that "value" of the sacrament of marriage which enhances and strengthens love between husband and wife, and might cause them to drift apart, even to the tragedy of the Divorce Court.

Some of the strongest opponents of Resolution 15 admitted that there were "exceptional cases," but urged that these should be dealt with privately, and that no public declaration should be made. Others felt that we could not let the prohibitory declaration of 1920 stand. Private dispensations would not meet the most pressing of the "exceptional cases," as many would rather suffer death than discuss the sacredness of their married life with anyone; though others, not so sensitive or refined, would talk over these matters with their clergyman, doctor, or friend. The majority, therefore, thought it better to deal with the matter openly, as all our Church people had a right to know what their bishops thought on this great moral question.

We all knew that the price of such frankness would be misunderstanding and misrepresentation on the part of all those who take their opinions from headlines; but that it was our bounden duty to give advice and to do it openly. We know that many will do what they will irrespective of the advice of the Anglican Bishops. Be it so. We have tried to do our duty, and each must decide his own course according to his conscience in the sight of God.

Peace and War

"The Conference affirms that war as a method of settling international disputes is incompatible with the teaching and example of our Lord Jesus Christ." (Resolution No. 25.)

"When nations have solemnly bound themselves by Treaty, Covenant or Pact for the pacific settlement of international disputes, the Conference holds that the Christian Church in every nation should refuse to countenance any war in regard to which the Government of its own country has not declared its willingness to submit the matter in dispute to arbitration or conciliation." (Resolution No. 27.)

These two Resolutions are the pith of the Lambeth discussions on war. And when we add the words of the Report that "we do not deny the right of a nation to defend itself if attacked, or to resort to force in fulfilment of international obligations," and while advocating reduction of armaments it is "only impracticable idealism that would advocate such complete disarmament as would leave the civilized world unprotected," we have practically its whole position before us.

To get rid of war we must seek to remove the causes of war. In that wrong conception of Nationalism, "my country right or wrong," which ignores the rights of other nations while ever contending for its own; in that great fear and suspicion which makes one nation distrust another; in that keen economic competition which exists, especially the struggle to possess the raw materials, do we find the forces which generate the war spirit. Peace rests on truth, justice, and good will; "co-operation and confidence," as the Prince of Wales put it. Peace, national and

international, can only be built upon the foundation of righteousness. As the Report states, "Only a spiritual renaissance can ensure the peace of the world."

"Modern progress has made the world a neighbourhood; God has given us the task of making it a brotherhood." The Christian Church throughout the world is the only power that can do this. No doubt it could be done quicker and better were the Church united and whole-heartedly seeking the Kingdom of God and His righteousness. Every part of divided Christendom claims to be doing this, and if each did so in reality the world would become one great brotherhood. We cannot afford to wait for the slow process of Christian re-union, the world moves too quickly for that, so we must appeal to all sections of the Church to awaken its own people to pursue earnestly the quest for righteousness.

We can all support the League of Nations, and other organizations which are working for peace, and can insist on every nation being loyal to treaties, covenants, and pacts. Statesmen would be obliged to listen if the Christian world spoke with one voice against participation in unjust wars, wars of aggrandisement or aggression. This even a divided Church could accomplish, and will, if she be true to Jesus Christ.

While each Nation must have its own expression of religion, the Church must be as super-national as Christ Himself, and He embraced Humanity. Nations which profess His Name are bound to express His Life in international relations as in national life. The ideal of the Christian nation, as of the individual, is to serve; that nation is greatest which renders the greatest service to Mankind.

My attention has been called to a statement made in a paper published in the United States, having a large circulation in Canada, which says:

> "Great Britain's next war may be sprinkled with holy water like all the others. A State Church must pay a price for the company it keeps. No Government will long support a religious organisation that fails to find God on its side when the guns go off."

Passing over the slur cast on the Anglican Church, it might be pointed out that England is the only part of the Anglican Communion which has a State Church, and while the Church has ancient endowments, most of which are private benefactions, she does not receive one penny from the State for her maintenance and work, except the stipends of the chaplains in the Army and Navy and other Government services, and the Roman Catholic and other non-conformist chaplains in these services are paid in the same way. So the Church, even in England, is not bound by financial ties.

The Church is not "pacifist"; she realises that war may be inevitable and right; she is not "impractically idealist," for she knows that as long as there are nations not governed by the Righteousness of God the world must be "policed," or else these nations will over-run the world. If all Christian men would respond to the call of Christ in these days of peace as they did to the call of their country in the Great War, and were ready to make as great sacrifices for peace as they did for war, we should win the great victory of peace, and wars would be no more. For that the Church must work till National life is consecrated to the service of God and man.

Credit Policy as a Factor in the Present World Depression

By G. F. Towers

TO a business world encouraged by the post-war recovery and a number of years of relatively satisfactory prosperity, the extent of the present world-wide depression has been a decided shock. During the latter years of the prosperous period, we had been told, not infrequently, that a new era had dawned for business, and that the suffering and disorganization which arose from the trade cycles of the past need no longer be expected. Nevertheless, with such statements still fresh in our minds, we find ourselves in a depression of a severity unequalled during the present generation, the best feature of which is the fact that it is encouraging a close examination of the reasons for its existence.

In the opinion of many people, the part played by currency and credit in business prosperity, or business depression, is of such extreme importance that it deserves to be given first consideration. Perhaps the best way of dealing with this rather complicated subject is to lead off with a series of simple statements of fact, which should command ready acceptance.

As business is conducted in terms of money, it seems obvious to say that an increase in business requires an increase in money, if prices are to remain stable. During the history of the world, money has consisted of various things, but for a long time gold has been pre-eminently the medium of exchange. Not so long ago, actual gold coin was used and passed from hand to hand, and if the currency of the gold-standard nations of the world still consisted in its entirety of gold, we should have little difficulty in understanding that an increase in business and trade must be accompanied by an increase in the supply of gold, unless prices are to be allowed to decline. Clearly, business transactions can be conducted with a smaller amount of currency at a low price level than they can on a high price level. In the gold-using world I have pictured above, let us imagine that business ingenuity and leadership brought about an increase in the production of goods. By an unlucky chance, it is impossible to increase the production of gold. The increased volume of goods comes on the market, but gold is then in insufficient supply to provide an adequate medium of exchange for the increased production—trade is hampered, prices fall, and on the new and lower level there is then sufficient gold to conduct the world's business.

If all currency consisted entirely of gold, or was backed 100% by gold, no "management" of currency would be possible, and at a given level of production, prices would depend on the chances of gold production. Fortunately, the world has graduated from so rigid and inelastic a system. Gold coin has almost altogether passed out of use as a medium for cash purchases, or for reserves of commercial banks. It is used as a reserve by central banks, and not necessarily to the extent of 100% of the central banks' liabilities in the form of note issues, or reserve deposits of commercial banks. It should be noted that under the system in vogue in many countries, the commercial banks keep a comparatively limited amount of actual paper money in their vaults. The greater part of their reserves consists of de-

posits with the central bank. These reserve deposits constitute a call on an equivalent amount of currency, in case of necessity. To all intents and purposes, these deposits are currency, and in future I intend to use the words "central bank currency" to embrace both outstanding notes of the central bank, and the deposits which the commercial banks maintain with the central organization.

Legal requirements of central banks, in most cases, do not call for more than 40% gold as a reserve, and thus, for one million dollars of monetary gold in the world, it is possible that two and a half million dollars of central bank currency may be in existence. By this system, the world found means of providing for the monetary requirements of an enormously enlarged production, getting away from the imperative necessity of relying on the lucky chance of gold discoveries, or as an alternative, throttling down business to a price level which would probably have been but a fraction of the existing figures.

While 40% has been taken as a normal average of minimum legal requirements in connection with gold reserves, these reserves might obviously, in certain circumstances, be as high as 100%. Within certain limits, the percentage of gold reserve depends on the policy of those in authority. Thus, man has replaced the mine as the determining factor in the quantity of currency in existence; and if expansion of credit or contraction of credit are important factors in the business cycle, the actions of those controlling central bank policy are of vital interest to the business world. If the course of events of any business cycle is recalled from our memories, I think we shall all agree that credit expansion and contraction did play a major part in the ups and downs of these cycles.

The story has unrolled itself before our eyes, and those of previous generations, time and again in the last hundred years, but as soon as one depression is over, its lesson is forgotten almost immediately. Here is the sequence:—extremely easy conditions and low rates in the long term credit markets of the principal financial nations of the world lead to money being borrowed for new projects to be undertaken by governments and companies all over the world. While the new projects are under construction, they put no goods in the market for sale. On the contrary, their purchases of materials and their employment of workers result in an increased demand for goods from existing sources of supply. Domestic and international trade is given an immediate stimulus. The business world is encouraged and becomes more optimistic, result—fresh projects—additional stimulus. If, as time goes on, the development proceeds too rapidly, credit supplies commence to show the strain, rates rise, and eventually the difficulty and the cost of borrowing result in new enterprises being discouraged and old ones left unfinished. Employment drops, purchasing power is curtailed, manufacturing enterprises pull in their horns and reduce their purchases of raw materials. Supplies of unpurchased goods mount, and the cry of over-production is heard in the land.

If one is asked the question—"What is the characteristic sign of over-production of a commodity?" the answer immediately is, "a fall in its price." But, when we say "price," we really mean exchange value—we mean that a larger quantity of the over-produced commodity has to be offered in exchange for commodities which are not suffering from over-production. If all commodities experience a price decline of equal percentage in terms of money, a bushel of wheat or 5 lbs. of cotton still command 5 lbs. of copper at the new level, just as they did at the old. In such a case, it is only the value of money that has changed.

In the earlier stages of a change in money values, we never find that all com-

modities decline on an even basis. First among the sufferers are the raw products. Before these products reach the consumer, they have a large percentage added to their cost through transportation, manufacture, and distribution; and in all these activities the wage cost is an important, often a preponderant, factor. In our modern civilization, wage rates change slowly, and so we find a period in the depression when the price of manufactured goods is quite out of line with the changed price of raw materials. The farmer who bought a certain manufactured article one year for one hundred bushels of wheat, next year must pay two hundred bushels for the same article. His purchases are necessarily halved, and while the rate of wages which factory workers receive may remain the same, the *amount* they receive is reduced by unemployment—their purchasing power is limited, and the world's trade receives a further blow. Disorganization ensues, and we have the spectacle of apparent over-production of almost all the principal commodities of the world, at a time when an enormous number of unemployed are only too anxious to find some means of obtaining these "over-produced" commodities in one form or another.

It may properly be suggested that the above recital is too obvious to merit repetition; that we all realize that this is exactly what has been happening in the world during the last year and a half, and it is quite plain that if raw material prices remain as they are, finished goods cannot be sold at the old price to raw material producers; therefore, finished goods must be reduced proportionately in price; certain of the costs of production, such as interest on funded debt, are fixed for a long period of years; others, such as rents and taxes, are slow to change, and price reductions are made, first at the expense of profits, and later, of necessity, by cutting wages. The world then starts off on a new price level which, in the present case, might be 20% below the old one. Even if these statements are conspicuously obvious, they serve a good purpose, because it is most desirable that their meaning should be fixed in our minds. They mean that the world's business will eventually reach an even keel after a drastic change in the value of money. They mean that after great loss and suffering on the part of millions, no one is a whit better off, except a small minority of the creditor class, and the few people who gambled on the short side at the right time. Simple as this is, there are far too many people to-day who refuse to recognize that it is a change in the value of money that has brought the world to the present crisis. They refuse to recognize that if money remains at its present changed value, innumerable and painful adjustments remain to be made. Thus we still have with us, though in much diminished number, those cheerful prophets who characterized last year as merely one of psychological depression, or those who—ascribing the change to over-production—must logically advocate world-wide curtailment of all the apparently over-produced commodities. It is forgotten that the total purchasing power of the world is governed by the total volume of production valued at current prices, and purchasing power can be increased only by increased production.

Let us here retrace our steps, and review briefly the conclusions which have so far been suggested:

1. Other things being equal, an increase in business necessitates an increase in the volume of money to maintain prices:
2. If money consisted only of gold, an increase in business would necessitate an increase in the volume of monetary gold:
3. But gold is now treated only as a reserve:

4. Within certain limits "Central bank currency" can be expanded or contracted independent of any change in the volume of gold:
5. Central bank currency is the foundation for general bank credit:
6. Easy credit conditions accompany the expansion periods of business cycles, and scarcity of credit is always in evidence at the commencement of business depressions of any importance.

It is time now to pass from the general to the particular, and to see how the theory fits in with the events of the last ten years. The United States emerged from the war as the dominant factor in the world's financial affairs. Her banking position in 1921 was an over-extended one, but co-incident with the reversal in business, gold started to move to the United States in enormous quantities. Between the years 1921 and 1925, the net import of gold into the United States was in excess of $1,500,000,000. The commercial banks' indebtedness to the Federal Reserve system was soon paid off, and the country found itself with enormous financial resources available for investment. The easy credit conditions precedent to an expansion were thus clearly in evidence. Low rates, and lack of a pressing demand from the domestic market for capital, caused them to turn their eyes towards foreign possibilities, and as so often happens in that country, they moved swiftly and enthusiastically. The year 1924 was the first one in which really large foreign financing took place, but in the five years ending 1928, the United States lent $6,047,000,000 of new money to foreign countries, which means that during these years the United States created sufficient credit to put $6,000,000,000 of spending power into the hands of other nations. Such an efflux of credit in a five-year period is unique in the world's history, and the effect on world trade was amazing. The lender of these dollars naturally shared liberally in the resultant prosperity, and prices of common stocks of United States corporations rose rapidly. Thus was created another demand for credit on a large scale to finance the rise in the market. Here a word of explanation may be interjected by saying that increased credit is required to finance a rising stock market, only to the extent that stock-owners withdraw their profits. This took place on a large scale in the United States, and the withdrawals were used to a certain extent to purchase articles for consumption and, to a large extent, to purchase newly created issues. Thus the market, whose rise had been due to prosperity, intensified the prosperity by the very circumstances of its rise. It seemed as if the millennium had been reached, until the intensified demand for credit raised rates all over the world to commercially impossible levels. In many cases it became impossible to borrow money, no matter what rate was offered. The door was shut in the faces of foreign borrowers, and foreign government bonds are in many cases still selling in New York at panic levels. The inevitable curtailment in business, and the subsequent decline in international trade can only be measured in terms of billions of dollars.

There is no question that during the latter years of the period described, the United States led the world on a credit "spree," and put a strain upon the credit resources of the world which would shortly have become unbearable. Strenuous action on the part of central banks finally resulted in the bubble being pricked, but opinion is now becoming quite definite that our present situation would be immeasurably better if proper measures had been taken by the United States early in 1928. Such, at any rate, seems to be the substance of much of the testimony being received by the Committee of the United States Senate, which is presently

engaged in examining banking matters. But, while early action on the part of central banks is highly desirable at times, when over-expansion of credit is leading the world into trouble, strong measures to ease credit are essential immediately the tide turns. Otherwise, a chain of circumstances is set up, which results in excesses in the deflationary movement, even more disastrous than those which are to be seen during inflationary periods.

It should be noted that the proper criterion of easy credit conditions is not found in call loan rates, or the rates on short term bills. New developments and the satisfactory functioning of international finance depend on conditions in the long term money markets, and the forcing of funds in this direction is the principal function which a central bank can perform in endeavouring to stem the tide of depression. Contrary to the general impression, the long term money market in the United States has never been in an easy position since the depression began, and is not in an easy position at this moment. Thus, the world's principal long term money market is still closed for repairs, and France, whose resources qualify her for a leading position in this respect, is only taking the first step towards assuming her share of responsibility for world financing. Great Britain, on the other hand, has done everything in her power to continue foreign financing to the greatest extent that her resources will permit, and, in the course of keeping rates as low as possible in London, has parted freely with her gold. It must be recognized that not all central banks can exert a major influence in these matters. The power of an individual central bank to act is limited by its gold resources. The central bank organizations of France and the United States control 60% of the world's monetary gold supply, and the remainder of the world's gold is distributed in such a way that no central bank, outside of France or the United States, is in a position to take independent action to ease world credit conditions at the present time, without risking the loss of its gold supply. The unbalanced situation, in respect to location and control of the world's gold supplies, places the main responsibility for any action on the United States and France. In the United States, for example, the bond market is not yet in a really satisfactory condition, and if domestic issues are to be hampered by this situation, and international financing eliminated absolutely, it will be difficult to find a basis in the near future for the re-establishment of world business and the recovery of commodity prices. Short term funds have accumulated, but an easy money policy on the part of the central bank is necessary to stimulate the movement of money towards the bond market. France, too, must accelerate her action in these matters, so that more of her gold is available as a basis for the credit requirements of the world. The total supply of gold in the world is ample for the support of present, or moderately higher price levels, and for financing normal expansion in business, provided that it is not allowed to remain idle in the hands of the wealthy countries through the accumulation of excessively high reserve percentages. Thinking along these lines then, gold shortage is not the problem of the moment. The problems of the moment are two in number—understanding and co-operation—and of these, the first is the more important. It is inconceivable that the world should continue much longer to tolerate these drastic changes in the value of the medium of exchange, the last one of which has disrupted world commerce to an extent which we are realizing more clearly each day. Acute necessity in the past has often produced the necessary invention; we must hope that it will not fail to do so in this case.

The Art of Enamelling

By Richard Hemsley

THE history of enamelling goes back to ancient times. No doubt the ancient Egyptians knew how to put melted glass on metal, which is enamelling. Of medieval enamels it is not my purpose to speak. These are numerous and beautiful, and many books have been written about them.

It was my privilege a few years ago to give several lectures in connection with my business as jeweller—enamelling being one of the subjects—and I was fortunate enough to be in possession of many photographs of medieval art taken from the enamels in the Baron Rothschild collection given to the Louvre, Paris; these I had prepared and coloured for lantern slides. It is quite possible that some of these enamels were by Benvenuto Cellini, the great Italian jeweller and enameller.

As a manufacturing jeweller, I, of course, recognized the beauty of enamels, but it was not until the year 1893 that the possibility of working in enamels came to me. In that year, American tourists returning from Europe via the St. Lawrence route were anxious to purchase souvenir spoons of Montreal. All that we could furnish quickly was a salt spoon with a ten-cent coin cupped as a bowl, and a twisted silver wire soldered to the coin for a handle. These were sold as fast as we could make them.

We then used a 25-cent coin with a longer twisted handle, and sold this as a coffee spoon. I shall never forget the remark of the first American lady who purchased one of these spoons: "Isn't it cute, stirring one's coffee with Queen Victoria." We always selected new Queen Victoria coins for this purpose.

One day a tourist showed me a silver spoon, the handle of which was decorated with the coat-of-arms of a European city in enamel. I then decided, if possible, to teach myself the art of enamelling.

Having studied at a School of Art and Design in England, I felt confident that if I could add colour to design, a profitable trade could be developed in enamelled jewellery and souvenirs. I made enquiries at both McGill and the New York City libraries for books treating on the art of enamelling on metals, but, as far as I could learn, no such book had been printed in the English language up to the year 1893. I further learned that enamellers were taught from father to son, and where these craftsmen were employed, they worked in secret.

Having found where enamel materials could be obtained, we began experimenting, and in time succeeded in producing a Dominion Coat-of-arms, and a Maple Leaf in silver, enamelled in correct colours. We used steel dies on which was placed the metal to be stamped, and with the aid of heavy drop-hammers, raised walls to take the enamel, dispensing with the labour of cutting out the spaces by hand. When making articles too large for die work, we etched out the spaces, using acids for that purpose, which was a great saving of work. We then began to make enamelled souvenirs, using designs of local, as well as of Dominion, interest, and sold these throughout the whole of Canada, even as far as Dawson City.

In the meantime, merchants from the Island of Bermuda, hearing of our enamels, visited us and gave considerable orders, asking that the Angel Fish be used as the central design. We extended our business to Jamaica, Cuba, Mexico, Barbados, and the Panama Canal region, using designs of local interest, and often visited the countries to get suggestions.

Our enamelling business increased so rapidly that we soon had 200 workers employed in the art, and this success developed an ambition for further fields; so one day I packed my sample case, and took passage for Liverpool. My intention was to open business in London, but I found it impossible to get a hearing in that great city, so I called on a merchant with whom I had done business, and told him of my difficulty. He said I must secure personal introductions, and offered to give me half a day of his valuable time.

We went to the office of the Lord Mayor, Sir Faudel Phillips, and were given the name of a firm, who represented us in England for many years. I then called on Lord Strathcona, showing him my samples. He asked me to present a number of the gold-enamelled maple leaves, made as brooches, to the Prince Edward of Wales Hospital Fund, which I gladly did, adding to each leaf a small diamond. I duly received a letter of thanks from Lord Strathcona, in which he stated that I would be pleased to know that the Princess Beatrice had bought one of the brooches for her mother, Queen Victoria.

When in London, some years later, I called on the Editor of *The Studio*, stating I was an amateur enameller in search of information. He advised me to buy a work on European enamels by Sir Henry Cunnynghame. This book was published in 1906, and, reading it from the viewpoint of a practical enameller, it is a wonderful treatise on an ancient art.

From this book I have culled much information on medieval enamels, also the following quotation from "The Treatise of Benvenuto Cellini on Enamelling," translated from the Italian in 1898, in which he says: "I propose telling you how to enamel on gold, and then on silver, for both gold and silver there is little difference in applying the enamel, but red enamel cannot be put on silver, because silver does not take it."

In my first experiments I found that red enamel became a muddy brown when applied to silver, but as I particularly wanted to enamel on that metal, and to use red in the majority of pieces, I worked trying to overcome this difficulty, but it is possible had I known that so great an authority as Cellini had stated that it could not be done, I might never have tried to do it. After much experimenting, I discovered how to put red enamel on silver in spite of the fact that Cellini had said it could not be done. Enamelling was in its glory when this great Italian wrote the article I have quoted.

The Editor of *The Studio* gave me a letter to Alexander Fisher, which I delivered at his studio in South Kensington. As he began to show me his work, I exclaimed, "You are the missing link," meaning that as I had developed enamelling on strictly commercial lines, he was engaged in what I considered high art.

As I expressed a wish to purchase an example of his work, he sent one of his students to his house for the enamel entitled, "The sons of God saw the daughters of men that they were fair," and I lost no time in becoming its owner. In a recent letter to me, Mr. Fisher writes of it in these words, "It was a great effort as a piece of enamel. There is nothing like it in the world," and refers me to his article on enamels in the 1926 edition of the *Encyclopaedia Britannica*.

Armed with a letter from Mr. Fisher to the Curator of the Victoria and Albert Museum, South Kensington, I was permitted to examine a number of rare enamels. Two of the attendants were always present; one held the article, allowing me to turn it in his hand, but never to hold it alone, no one ever being allowed to do so, owing to the destruction of the celebrated Portland Vase by an irresponsible person.

In the year 1885 the Art Division of South Kensington, London, employed a French enameller to give lessons. Alexander Fisher attended two of these lectures, working out the rest by himself. Mr. Fisher has long been considered the finest enameller in England, and all the enamellers in the Old Land may claim to be his pupils. Among them was Sir Henry Cunnynghame. This gentleman was a lawyer in the Home Office who took up enamelling as a hobby.

I learn from Cunnynghame's book, that Ruskin, the great art critic, declared in 1860 that enamelling was dead in England, and tried in vain to revive it. Of Mr. Fisher's work, Sir Henry Cunnynghame says:—"It does not belong to any school, and is chiefly marked by a preference for transparent opalescent hues. He may fairly claim to be the best artist of all the regular workers in enamel, and unquestionably will be best esteemed in the future. As an art jeweller he has also done good work, and a chalice in ivory and gold, now in one of the churches in Brighton, is, I think, one of the finest pieces of modern goldsmiths' work."

At the present time enamelling is out of fashion, but this does not mean that the art is not being practised at all times by certain artists, as the following incident will show. Some years ago I met a Boston lady wearing a very handsome enamelled brooch; upon asking her where she got it, she said she attended a school in Boston where students were taught to design, make, enamel, and finish such articles. I understood from her that each article was an original design.

In the year 1911 I was honoured by being given a Warrant of Appointment as Jeweller to His Majesty King George V. Although it is many years since I ceased enamelling, I have not lost my interest in it. May I say a few words as to its future: History tells us that art declines through war, and this has been especially true of enamelling. Much of the world's wealth having crossed to this side of the Atlantic, it is to this continent I look for its revival. I believe interior decoration will be an important field of adventure for the enameller.

Think of the beauty of gray iron doors with panels of coloured cloisonné enamel! Where is there a better place for displaying its beauty than in the decoration of the mantelpiece and supports!

Remember that enamels on fine gold can be made to represent any shade of colour from blood red of the ruby to the colour of flame. Enamels made with gold and uranium pigments glow upon gold like a fiery furnace.

If gold displays the various tones and hues of the sun, silver is fitted to display those of the evening and night. This metal is best used with watery greens or blues. Try to imagine pictures of enamel made in sections the same as stained glass windows. A skilful enameller can produce colour effects on gold and silver equal to stained glass windows with a bright light behind them. Knowing its possibilities, is it any wonder that I am so enthusiastic as to the future of this beautiful art?

Chinese Studies

By Professor Kiang Kang-hu

Definition and Explanation of the Term

THE term "Chinese Studies" is not only new to Western university curricula, but also to Western dictionaries and encyclopaedias. It requires definition and explanation. The word has its narrow sense and its broad sense. In its narrow sense it means, simply, the study of the Chinese language. In this case, the Chinese department in a university is of the same nature as the German or the French department, and its studies are similar to those of any other ancient or modern language. In its broad sense, it means much more than "French Studies" or "German Studies." First, because China has been a separate world, and all branches of its study are indigenous and independent. Second, because the Chinese language, especially in its written form, has been too little known to outsiders, and the various subjects that it deals with have not yet been properly distributed under their respective headings, as is done in French, German, etc. So the "Department of Chinese Studies" embraces not only language and literature, but all other fields of Chinese culture and learning.

The Value of Chinese Studies

Too much emphasis cannot be placed upon the value of Chinese Studies in Western universities. The value of Chinese Studies is two-fold; first, the true value in the study itself, and second, its relative value to the outside world. Briefly, in language the Chinese represents the only living hieroglyphic form in its highest development. Without studying Chinese the right conception of language is incomplete. In history and geography, the Chinese preserve the only old and unbroken record of one-fourth of the human race and one-fifth of the inhabited land. In government and social institutions, the Chinese have experienced all phases of political and economic evolution. In religions and philosophy, the Chinese have founded among themselves just as many different sects and schools as the West. In literature and art, the Chinese have long been inspiring factors to the other nations. In science, the Chinese are exclusive inventors of the compass, paper, printing, gunpowder, seismograph, etc. Practically everything can be traced back to a source in Chinese literature, whether originating in China or occurring coincidently elsewhere. Besides, the whole era of Chinese literature is still a virgin soil, unexploited by foreigners; new discoveries, or, rather, rediscoveries, may be expected upon any subject at any time.

The Long Neglect

Despite the above-mentioned facts, the study of Chinese has been long neglected in the West, and is usually omitted from the general plan of instruction in schools and universities. The so-called world history and geography begins only with Egypt and ends with the white man's colonization. The ancient republican governments of Yao and Shun, the Communist experiment waged by Wang Mang of the Western Han, and the State Socialist Party headed by Wang

An-shih of the Northern Sung are unknown to the students of social sciences. The teachings of the Taoist Lao-Chuang, the Egoist Yang Chu, the Altruist Mo Ti, etc., are entirely ignored by those who specialize in comparative religions and philosophy. The immortal names of Ssu-ma Ch'ien, Han Yu, Tu Fu, Su Shih, Ku K'ai-chih, Wu Tao-tse, etc., are unfamiliar to those who have mastered literature and arts. The mention of the earth being round and moving, in the Confucian classics some twenty centuries before Copernicus, appears to awe modern astronomers. Half a century or so ago, the Chinese were utterly ignorant of things in the West, just as the Westerners were of things in China. But, today, since the Chinese have paid a big price for the bitter lessons forced upon them by the Westerners, a Chinese public school student is better informed on Western subjects than a Western college professor is on Chinese subjects.

Reasons for this Long Neglect

There are many reasons for such neglect and ignorance of Chinese Studies on the part of Westerners. First, because transportation and communication between China and the West were very difficult. In spite of the official visits exchanged between the Han and the Roman envoys of the ancient world, the Marco Polo travels of mediaeval times, and the missionary and commercial relations of the early part of the modern age, China has always appeared to the Westerners as a land of mystery. Even now, when China can be reached by modern means of transportation and communication in hours and days instead of months and years, average Westerners still think of China and the Chinese in terms of curiosity and adventure. The seeming remoteness of China governs the western conception of the importance, or rather, unimportance of Chinese Studies.

Secondly, the fundamental difference between the Chinese type of civilization and the Western type makes apprehension and appreciation by Westerners almost impossible, at least in the beginning. Though human nature is about the same the world over, its expressions and interpretations are various and often diverse. Hundreds of cases can be cited in which Chinese and Westerners think, speak, and act in opposite ways. Westerners should not and must not look upon the Chinese from their preconceived and even prejudiced viewpoint and judge them with their own (the Western) standard and measurement. This may be to ask too much from the average proud white man. And this very pride has kept many great Western scholars from a real understanding of Chinese civilization.

Thirdly, the wide distinction between the written language and the spoken language in China debars Westerners from any literary attainment in Chinese Studies. Since the renaissance in the Middle Ages, Westerners have been accustomed to read and write in the vernacular form of their native tongue. This practice never occurred in China until quite recently. Though many foreigners who have long resided in China understand and speak the Chinese spoken language, this spoken language varies in pronunciation from place to place, and the dialect of one region is often not understood in another. Moreover, it is so different from the written form (the difference being greater than the difference between the modern Italian and the ancient Latin) that without a special study of the written language all literature, even contemporary publications, will be a sealed book to those who know only the spoken form, no matter how well. This is why the percentage of illiteracy has been high in China; this is also why few Westerners have any

access to Chinese culture. This wide separation of the two languages, spoken and written, in China has both advantages and disadvantages. This is something that requires serious consideration, but it cannot be discussed here.

Fourthly, the decline of the Manchu dynasty during the last century, with many military and diplomatic defeats and political and social weakness, has put China, and consequently Chinese civilization, in a very poor light. In other words, China has not been strong enough to make her civilization important to Westerners, who measure civilization largely by physical strength and material progress. In fact, China was blindly ignorant of the Western civilization, and was awakened only through the invasion and oppression by the great powers. Until China also becomes a great power and convinces the Westerners in a similar manner, her civilization may never be highly respected or even properly known.

Fifthly, the Chinese have never been a nation or a race skilful in advertisement. China has long been isolated and always self-sufficient and self-contented, except for a few ambitious rulers who sought intercourse abroad, and who, for this very ambition, have always been hated and disowned by their own people. The Chinese cared little to know others and to let themselves be known to others. Many things Chinese have been introduced to the West by Westerners without any intelligent selection or authentic interpretation. Still more have been exported through China's clever neighbour, Japan, who assumes the credit of their origination and monopolises the profit of their supply. The Chinese national character is more exclusive and retiring even than that of India, from which country the first religious missionaries were dispatched, though there has been no missionary work done by China.

The Recent Rising of Interest

World conditions have changed much since the beginning of the present century, and the change has been more rapid of late years. Evidences of the newly felt interest in Chinese Studies are manifest everywhere in the West. Some of my personal experiences may be here used as convenient illustrations. When I first visited Europe in 1910, there were hardly any institutions taking up the study of Chinese, though a few students were being trained for diplomatic and missionary work. No Chinese was invited to lecture on cultural subjects, and no organization sponsored such activity. On my second visit there in 1921, I found in London, Paris, Berlin, the Hague, Brussels, Leningrad, and Moscow national universities either maintaining a Chinese department or offering a Chinese course, and more students studying Chinese for its own sake, rather than merely for the purpose of becoming official interpreters. I was asked to lecture on philosophy, social science, literature, and art before many academic and social gatherings in various European cities. Organizations aiming at the study of China and the promotion of international understanding and friendship between China and the West, such as the Chung Hua Huei of the Netherlands, and the Orientalische Gesellschaft of Germany, could be found also in many other countries. When I first came to America in 1914, there were only two universities having Chinese departments——namely, Columbia University and the University of California. The Library of Congress had in its Chinese Division only the gifts of the Chinese government and other small private collections. Since my last visit in 1927, there have been instituted about 300 courses in Chinese studies at more than 100 universities and colleges. The Library of Congress has special appropriations for the annual

purchase of Chinese books, and has now approximately 150,000 volumes. All museums and many libraries have Chinese sections and curators for them. Special institutions, such as the Freer Gallery of Chinese Art in Washington, D.C. Harvard-Yenching Institute in Cambridge, Mass., China Institute of America in New York City, Pomona College scholarships for American students studying in Chinese universities, and the Committee for Promotion of Chinese Studies under the auspices of the American Council of Learned Societies, together with "the China Societies," "the China Clubs" and "the Friends of China" in the big cities all over the United States, are all new activities specifically designed for this purpose.

Reasons for this New Interest

The reasons for this new interest of the West in China and things Chinese are also manifold. Firstly, the prime cause must be attributed to the rapid change and great activities of the New China. The year 1900 when the Boxer Rebellion took place, resulting in the seizure of Peking by the Allied expedition, showed the first sign of China's unrest. Thereafter, political and social reforms, coup d'états, foreign invasions, military conflicts, bandit pillages, students' demonstrations, labour strikes, peasant uprisings, nationalist, socialist and communist propaganda, anti-foreign and anti-Christian movements, revolutions and counter-revolutions followed and were repeated. Their causes and their effects sometimes might be for better and sometimes for worse. But one thing is sure, that China has been widely awakened and is much alive. She is very energetic and very active; she is no longer a sleeping lion. This certainly attracts the attention of outsiders, and it proves to them, too, that China has yet enough stored strength and is going to live through another national crisis. China's friends as well as China's enemies, if any, are all now anxious to study her past and her present because she still has a future.

Secondly, the World War and its results have brought the ever-proud Westerners to a better sense. If they did not learn any other lessons, they were certainly taught to think that there must be something wrong with their type of civilization, and that there are other types of civilization which are not entirely worthless. To seek an antidote to their own defects of materialism, many have turned first, in a diametrically opposite direction, to the Hindu mysticism. After this reactionary period, which was a natural effect of the World War, they began gradually to look for something of a middle course, more practical but less aggressive. The Chinese idea and mode of life, neither extremely materialistic like the modern Western type nor extremely mystical like the ancient Indian type, will answer this very demand. The world will find in it both mental comfort and actual remedy.

Thirdly, the new youth movements in China of "literary revolution" and "mass education," though lowering the standard of true literature and education, have helped to popularize the course of Chinese Studies. The returned students from abroad form the vanguard of these movements; the college and high school students readily respond and support them, and the foreign missionaries quickly follow and loudly applaud. Among these three widely different classes of people there is one thing that is common, namely, the lack of sufficient knowledge of the Chinese written language. They all dread its difficulty, feel handicapped in

their association with the classical scholars, and long for something easier for themselves as well as for the illiterate and uneducated masses. These movements offer a great advantage, especially to those foreigners who, understanding the Chinese spoken language, can now read some contemporary vernacular publications and gain some knowledge of Chinese culture through the medium of these innovations. They begin to take an interest in it and make it better known to outsiders.

Fourthly, the going abroad of Chinese intelligentsia has influenced the Westerners' conception of China and the Chinese. Until the present century, most, if not all, Chinese abroad were from illiterate and uneducated labouring classes. Later came the students, who were, however, usually young and had no background in their own culture. Only in recent years have there been students abroad for post-graduate work and higher learning. Besides, on account of repeated revolutions and continual civil wars in China since the formation of the Republic, many Chinese scholars, for political reasons, have visited, and some are staying in Western countries. Moreover, since Western languages are being taught in Chinese colleges and high schools, and many more students are coming from and returning to China, books, pamphlets, and articles in Western languages by Chinese writers are increasing in recent publications. All these factors jointly spread the Chinese ideas and ideals over the world at large.

Fifthly, the return of foreign missionaries from China contributes largely to the promotion of Chinese Studies. They first went to civilize China by Christianizing the Chinese. By virtue of their long residence in China and their intimate contacts with some groups of Chinese, they acquired a certain knowledge of the people. Since the anti-foreign and especially the anti-Christian sentiments recently engineered by the Nationalists and the Communist propaganda, a large number of the foreign missionaries have been forced to leave China, and either close their missions or hand them over to the native Christians. On returning home, many find nothing better to do than to utilize their knowledge of China, no matter how little and inaccurate, to gain a living, for their own countrymen are beginning to take an interest in China, and know even less about China than these missionaries do. This explains the sudden creation of many positions—such as curators of museums and libraries, and the appointment of many professors and lecturers on Chinese subjects in the Western countries, especially in the United States during the last four or five years. With very few exceptions, this new profession is being monopolized by returned missionaries from China. But, whatever their original motive may have been, they must be given due credit as pioneers in this field and forerunners of real scholarship.

Development and the Real Place of Chinese Studies

The introduction of a culture has its regular stages. In the beginning of the international intercourse between China and the West, the first Chinese products appealing to Westerners were tea, silk, and porcelain. These are semi-natural products and most material in nature. But, from using silk the Westerners became attracted by the designs and embroideries, and porcelain led them to the study of shapes, shades, colours, and the paintings on the wares. This is the beginning of appreciation of Chinese pictorial art, gradually advancing from the concrete and the material to the abstract and spiritual states. Chinese calligraphy, poetry, and other forms of literature, together with theatrical art and music, are

coming as the next step. Finally, Chinese philosophy and social and natural sciences will all have their turn. Not until the accomplishment of a thorough study of all these subjects can the true value of Chinese culture or civilization be fully understood.

In our own time, in introducing Chinese Studies to the West, we should strive very hard first to eliminate and undo the existing misinterpretations and misrepresentations of things Chinese, then to clear away the curiosity and superficiality about the study. After this preparation, we may then present to the learned public a very general survey of the culture as a whole, from the Chinese scholarly viewpoint; and finally, encourage the students and direct them to the right way of acquiring first hand knowledge from the original source in each special line.

The great difficulty is, as has been pointed out before, that Chinese Studies, in a general sense, comprise subjects of all branches of world culture. No scholar can be expected to know them all. These subjects should be properly distributed in their respective special fields. After all, China is a part of the world and Chinese Studies are portions of human knowledge and experience of all kinds, recorded by and stored in one of the leading languages. But, these portions are vast and important; they are also unexploited by outsiders. In order to make them accessible, much greater energy and labour are required in the beginning than is the case with any other language. After the right classification and distribution have been made—that is, after all other departments of study have assigned to the Chinese portions of their respective subjects a sufficient and proportional place—the Chinese department may then assume its legitimate position among other departments in the institution, and pursue its line of pure language and literature.

The Position of the Chinese Department in McGill

The Department of Chinese Studies in McGill University is, however, not confined to pursue only the line of pure language and literature, at least for the time being. For this is the first attempt of a Canadian institution of high learning to include such a department. Much work of a preliminary and preparatory kind and much publicity are demanded. Since its establishment last fall, more work has been done in introducing the study than in the actual study itself. Everything Chinese seems new and strange to the University, as well as to the public at large. It needs sometimes childish explanations to childish enquiries. I venture to think that, for the next few years, we can probably plan our work in various aspects by the following process.

The first is, of course, the academic work of the Department. I am sorry to admit that the work of this Department at the present time is, and in the near future will be, not at all up to the academic standard that it should be. University students have to be taught the primer readers in Chinese, with the elementary lessons and exercises for public schools or for mass education in China. Though we are fortunate in having the Gest Chinese Research Library, the largest and most valuable collection of ancient and modern Chinese books in this country, yet few, if any, in our Department can now utilize its great service. We already have a fairly large lecture class on Chinese Culture in general, and a small class on both the spoken and the written languages. We hope we shall soon open a similar course for real research on special topics, with reference reading in both

Chinese and Western works. Among those enrolled, or among the larger number expected in the coming years, we are sure that some genius, or at least some seriously minded and specially inclined students will arise. Here will be developed the first Canadian Sinologists for future and further achievements. And others, going into the world with a little better knowledge of their Pacific neighbouring Republic, will certainly do general good to the nation and to the world. There will also be many preparing for diplomatic, educational, commercial, and missionary work in China. In addition, the native sons and daughters of Chinese parents, and even students from China and Japan, will find themselves at home in this Department. We probably have much to offer to the Chinese youths who come here in their own field of cultural study, which has been sadly neglected in most of their highly modernized schools and colleges at home.

Secondly, the University extension work will be important. In the first days of my lectures I found in my classroom, along with the registered students, many other attendants. After a week or so, I noticed a diminishing of their number, and at the same time I received letters from some of them expressing their regret at being unable to attend the class. The reason was simple. Either the University requirement of standard or the tuition fee was too high for them. Besides, three lectures a week seems too heavy for busy people, and the hours may not have been convenient. For them an extension course in the evenings will be most appropriate. We have already received many applications anticipating the formation of such a class. The Department would need more than one instructor in order to carry on work under the arrangement of the Department of Extra-Mural Relations.

Thirdly, the inter-departmental arrangements for lectures and discussions on Chinese subjects are well under way. As we notice that various lines of Chinese Studies are not properly distributed to their respective departments, and that students enrolled in this Department are only a limited number of those who have special interest in Chinese, this condition will debar all other university students from acquiring any knowledge of Chinese culture as a part of world civilization, and also keep all Chinese subjects out of the general plan of University instruction. The only temporary remedy for this grave defect is by inter-departmental arrangements; lectures on Chinese Studies pertaining to the given subjects may be given to classes of other departments and other Faculties. These lectures should be treated as a part of the regular class work of those departments with which they are arranged. Students of other departments should also be encouraged to visit the regular lectures of the Chinese Department on their special subjects.

Fourthly, inter-collegiate relation should be established. As McGill is the only Canadian institution having a Chinese Department, this Department may be expected to extend its service to other universities and colleges. Until other institutions also open departments of a similar nature, this Department can, upon request, offer a series of lectures to their students. Even in Montreal, there are other universities, colleges, and high schools, whose students are interested in Chinese Studies. Many lectures have already been requested for their student bodies. An inter-collegiate arrangement of this kind may be made officially through educational authorities. McGill may present such a suggestion, with subjects and syllabus of Chinese lectures, to other institutions in this country. This will promote a broader interest in Chinese Studies and will, too, show goodwill and the desire of McGill to serve.

Fifthly, service to the public at large will be our ultimate aim. The University is the educational centre of high learning, and it is also the intellectual centre of the whole community. As McGill has taken the lead in Chinese Studies, the public at large will no doubt look upon us as the source of correct information and wise advice in all related subjects. This Department is constantly receiving letters from all parts of this country and from the United States and Europe, on various topics and matters Chinese, from the Taoist classics to the sale of ladies' stockings. The Department always tries to do what is within its power, or to refer those who enquire to the proper organizations for reply. We do not wish to lose our academic dignity and become an information bureau, nor do we wish to lose the public interest in our studies and make them dry and dead. We see a great future in our field, and we must cultivate it and enrich it by public interest and public support. After all, the greatest of the University's services is the enlightenment and benefit of the public at large.

As this article is being written, the Hung Tao Society, an old Chinese organization for the study and teaching of Taoism and other Chinese philosophies, which has had a branch in San Francisco for fifteen years, is opening a branch in Montreal, with charter members numbering over one hundred. There will be two functions of this Society—a study circle with free lectures once a month, conducted by this Department; and a social meeting open to all who take an interest in China, in whatever aspects or connections. The former corresponds to an extension course, and the latter resembles the China Society, the China Club, and The Friends of China in various cities of the United States. This is only one of the seeds that we are sowing in this vast and fertile land. Who knows how great a harvest it may yield!

Book Reviews

COLLECTORS of McGilliana, if one may use this slightly objectionable term, and others who, though not collectors, are interested in the University and the story of its development, will welcome the recent appearance of a memoir, J. GEORGE ADAMI (174 pp. by Marie Adami: The MacMillans in Canada: Toronto: $3.00), describing the life and professional activities of a man whose work from 1892 to 1915 reflected credit of a high order on McGill.

Dealing briefly with Dr. Adami's boyhood days and preparatory work at Cambridge, the story progresses until in June, 1892, the young Englishman was advised that the Chair in Pathology at McGill was vacant, and that his application for the position would be welcomed. Realizing that this new field offered unusual opportunities, Dr. Adami duly applied, and on September 9th, while caring for a fellow-student who had developed typhoid fever in Switzerland, received a telegram stating that he had been appointed.

From this point, the memoir carries the story straight to Montreal, and at once the pages are filled with names familiar to those who in the past half-century have served McGill, or studied within her walls. As is natural, the names of the pioneers, upon whose research much of the modern development of the Faculty of Medicine was founded, come first—Macallum, Wyatt Johnston, Ruttan—and, later in the book, Nicholls, John McCrae, Birkett, Archibald—these are the

men whose personal and professional relationships with Dr. Adami are most interestingly described.

After presenting the story of Adami's great contribution to the establishment and development of a modern pathological department at McGill, and in the Royal Victoria Hospital, Montreal, the book covers his services on the Staff of the Canadian Army Medical Corps in the war years, mentioning his outstanding work in arranging the medico-historic documentation of the Canadian forces, and concluding with a brief account of his post-war work as Vice-Chancellor of the University of Liverpool.

All phases of Dr. Adami's work are touched upon in this memoir by his widow, but, in order that the book might adequately reveal the varied aspects of his life and professional career, a number of his colleagues have contributed chapters dealing with those activities in which they were associated, or in which their interest was personal and direct.

In the first of these contributed chapters, Dr. A. G. Nicholls writes on "Adami as a Pathologist"; in the second, Dean C. F. Martin deals with "Adami's Life and Influence at McGill"; in the third, Dr. Maude Abbott takes as her subject "Professor J. G. Adami and the Medical Museum of McGill." Following these are chapters by Dr. Oscar Klotz, now Professor of Pathology and Bacteriology in the University of Toronto, on "Recollections of his Days in Montreal;" by Dr. A. S. Warthin, Professor of Pathology at the University of Michigan, on "The Significance of his Work in Pathology"; and finally, by Dr. Ernest Barker, Professor of Political Science, Cambridge University, on "Memories of the Consultative Committee, 1920-1926."

Though these chapters enter more deeply into matters of pathology and professional accomplishment, the book, as a whole, including these chapters, is not solely for the medical reader, but is of interest to the physician and the medical student, and almost equally to those who, with no profound knowledge in medical matters, are interested in a well-written book dealing with a man of outstanding personality and, through his accomplishments, with the modern development of McGill. Unfortunately, memoirs of this type, with similar excellence in preparation and presentation, all too seldom appear.

R.C.F.

People who continuously give way to the demands and desires of the present invariably become people with a past, and lay themselves open to the petty jabberings of envious incompetents. This has been the lot of Heinrich Heine. He was not only a reprobate, but also a Jew—a combination which has given the Bodyguard of German Morality no rest. And thus a critical, objective study of the man's works and his influence was made secondary to the mining of scandal and the scavenging of filth. It is to counteract this tendency that Professor Hermann Walter, M.A. (Edin.), Ph.D. (Munich), Professor of German at McGill, undertook to write HEINRICH HEINE, a critical examination of the poet and his works (J. M. Dent & Sons Ltd., 322 pp. $3.75). And he has succeeded to a most convincing degree.

To appreciate the disturbing meanderings of so complicated a character

as Heine's, one must possess an irrepressible sense of humour. To take delight in his virulent, uncomprising, and exceedingly clever executions of people and things, one must have an unlimited *joie de vivre*. And Professor Walter evidently possesses both. He is unconcerned with the moral implications of this or the other act of the poet; he refuses to question the propriety of this or that statement. He is interested only as to whether any piece of writing is interesting and clever, and finally whether it is art. If it satisfies his aesthetic sense, he pulls a heavy curtain over the ethical lenses of his mind—and laughs roguishly. This is a healthy, modern attitude, and particularly gratifying coming, as it does, from a supposedly-academic professor.

The biographer refuses to undertake a comparative evaluation of Heine as a poet, believing that any such attempt must prove futile. His contention is that "every great poetic personality is *sui generis*, and therefore incomparable." This also is, it seems to me, a very sane and admirable conception. Great lyric poetry must be subjective, and its appeal, therefore, must necessarily be subjective also. Literary standards, particularly in poetry, are to a great extent useless. At all events, they must be made flexible to yield to the idiosyncrasies of the poet concerned. Thus the attempt on the part of some to depreciate the poet in Heine entirely, and the equally exaggerated suggestion that Heine is "the greatest lyric poet of Germany, if not of the world," are in each case due to prejudices which should play no part in literary appraisal. Heine's lasting appeal is the only necessary proof of his greatness; and the unquestionably high quality of his lyricism and his inimitable and fearless sarcasm must at all times place him in the first rank of literary artists.

I do not think that in his book Professor Walter is entirely impartial. There is evident a conspicuous desire to redeem the reputation of the German poet. This may, of course, be a natural reaction to the excessive opprobrium to which Heine has been subjected. Still, it was not entirely necessary. For although one may be in absolute agreement with him when he says that "as long as we speak of art, all reference to the moral character of the artist is beside the question," yet the opposite is equally true. The excellence of one's art does not vindicate the looseness of one's character. And Heine undoubtedly was, as Dr. Walter admits, a man entirely devoid of any sense of consistency or responsibility. *Tendenzpoesie* undoubtedly deserves all the sarcasm that Heine poured on it in his *Atta Troll*. *Ars causa artis* is perhaps the best guide to the writing of poetry. But this attitude is certainly not tenable in the realm of philosophy or politics. In the writings and in the actions of Heine with regard to the abstract concepts of philosophy and to the practical application of politics, there is evident a man who is beyond doubt *charakterlos;* and Dr. Walter's attempt to breathe character into this unquestionable egotist remains unconvincing. Heine possessed no *Weltschmerz;* he was capable of feeling only the *Selbstschmerz*. There would be nothing objectionable in this if he left the *Welt* alone.

There is no doubt that, in English, Professor Walter's is the most comprehensive and most satisfactory critical biography of Heine. For while Professor Atkins's book is perhaps more adequate in its treatment of the poet's works, Dr. Walter enters much more minutely into an analysis of Heine's life as reflected and coloured in his writings. The writer's emphasis on the purely subjective *Erlebnis* of Heine, and on the metamorphosis which his experience goes through in

the poet's imagination shows a deep appreciation of Heine's art; and the limpid, lucid style and the gentle, subtle humour render the work delightful.

DAVID LEWIS

In the same impartial and cosmopolitan spirit that distinguishes his HEINRICH HEINE, Dr. Hermann Walter presents a new critical biography of one of the most remarkable of Jews in his MOSES MENDELSSOHN, CRITIC AND PHILOSOPHER (Bloch Publishing Co., New York). In view of the fact that no previous attempt has been made to give to the English reader a complete survey of Mendelssohn, this volume will be heartily welcomed as a valuable contribution to cultural criticism of the eighteenth century. The gentle but firm personality of Mendelssohn stands out vividly against the background of eighteenth century Germany, with its atmosphere of rationalism in philosophy and gradual intellectual emancipation of the Jews.

It is impossible to realize Mendelssohn's true significance without some idea of the Jewish cultural movement at that time. The restrictions imposed upon the Jew from without, the narrowness and superstition of the ghetto itself during the general upheaval in literature, philosophy, education and religion, brought an inevitable clash. Since the death of Spinoza in 1677 the Jews, as a cultural force, were simply non-existent. It was Mendelssohn's *Phaedo*, a treatise on the immortality of the soul, that again "drew attention to the Jews as a people still to be reckoned with in the evolution of European thought."

The friendship between Mendelssohn and Lessing was of supreme importance in the lives of the two men. The first result of their association, Mendelssohn's *Philosophical Dialogues*, reveals the characteristics of all his philosophical work. An exponent of the *Enlightenment* school of philosophy, his purpose was "not so much the quest of truth as the happiness of mankind." Such truth as would contribute to this happiness was made the sole test of ultimate truth. Belief in a personal Deity was axiomatic, since Mendelssohn regarded this belief as essential to mankind's happiness. It is this bias that precludes all possibility of free metaphysical investigation on the part of Mendelssohn.

The *Phaedo* placed the author definitely among the great contemporary philosophers. The Socrates of these dialogues is a typical "eighteenth century philosopher of a strongly marked bourgeois hue." To his contemporaries, however, Mendelssohn's arguments were incontrovertible; dissenting voices were few. The success of this work was overwhelming. It was translated into nine languages, and "people read it with a feeling of intense relief analagous to that caused by the deliverance from a great national peril."

Though long obsolete as a philosophical dissertation, the *Phaedo* is still regarded as an unique model of purity of style. Mendelssohn's real contribution to philosophy is now recognized in its true light: it was he who "popularized and stimulated a general interest in philosophical questions among people with any pretence of culture." The elegance and clarity of his style marked a departure from "the dry philosophical jargon of his predecessors."

Despite his distaste for controversy, the shrinking Mendelssohn nobly championed the cause of his co-religionists whenever his convictions prompted him. He cannot, however, be regarded as "the reformer and emancipator of Judaism," as he is often erroneously called. In fact, his passive attitude on many occasions caused him to be accused of a want of sympathy for Jewish interests. Nor can he be considered a "religious reformer." To him the faith of his fore-

fathers was logical and fixed. His is an unique case of one "who managed to harmonize within himself the hopeless conflicting claims of the old Judaism and the new culture."

Mendelssohn is in some measure responsible for one form of emancipation, however. His German translation of the *Pentateuch* and the *Psalms* led the Jewish people "back to the fountainhead of their religion, which had become unintelligible in its original Hebrew. At the same time, by a strange paradox, it also proved the path which led from exclusive Judaism to inclusion in German nationality." Mendelssohn's translation eventually brought about an inevitable assimilation of the Jews into German nationalism.

In concluding, Dr. Walter raises a moot question of today—the nationalizing of the Jewish alien. This process, he says, is as slow today as it was a hundred and fifty years ago, and as far from completion. Zionism, he thinks, is but a surrender to the narrow chauvinism of an anti-semitic environment which asks for "nothing better than such a frank confession of separate national aspirations;" reconciliation of Jewish culture with its surrounding culture is problematical; preservation of racial entity in a non-Jewish environment is beset with unconquerable obstacles. Is assimilation the logical and inevitable solution? The question is provocative.

Dr. Walter concludes his critical thesis with a compact résumé of the work and special significance of Mendelssohn in literature, philosophy, aesthetics and the general cultural movement of his time. The author's comprehensive method gives the reader a clear and vivid evaluation which is essentially sound, thorough, and cogent.

FLORENCE KAPLAN

In his CANADA'S FIGHTING AIRMEN (The MacLean Publishing Company, Limited, Toronto, $5.00), Lieut.-Col. George A. Drew has presented the authentic stories of twelve distinguished flying men. Canadians, with some knowledge of the adventures of Lieut.-Colonels Bishop, Barker, and Collishaw, have been wont to accept the fact that their fellow-countrymen provided to the Allied cause a number of pilots whose exploits, they have always agreed, received a very fair degree of attention in the press and reflected distinction on the whole Dominion.

That the measure and degree of the distinction referred to is even today not fully appreciated is the conviction borne into the reader's mind as the pages of Colonel Drew's book absorb his attention. Col. Bishop, yielding to public demand, revealed in outline the story of his own adventures in his book WINGED WARFARE, and *MacLean's Magazine* presented a series of articles by Col. Drew containing in substance the material used in the volume at present under review. These efforts were fascinating, but neither can compare with the book now presented, which, in the completeness of its information and the skill used in marshalling the facts, provides at once a reference book of high value and a remarkable volume of true adventure.

It is probably no exaggeration to say that in years to come this book, or stories based upon its contents, will be read with something of the same pride and pleasure with which we of this generation read the authentic or legendary volumes dealing with our storied past. And future generations, reading of Col. Barker's challenge to the leading pilots of Austria, will sigh, as perhaps we have sighed when reading SIR NIGEL, or THE TALISMAN, or IVANHOE, to think that the days of chivalry are past. Chivalry and the Great War seem poles apart, yet in authenticated stories from

the days when chivalry was in flower what incident surpasses the superbly insolent invitation to fight, with every advantage yielded, showered by Col. Barker and his officers upon the aerodromes where the finest fighting pilots of Austria had their headquarters. Could the dignity of the following have been exceeded by any who fought in armour, on horseback, with gold-spurred heel;

"Major W. G. Barker, D.S.O., M.C., and the Officers under his command, present their compliments to Captain Brumowsky, Rither von Fiala, Captain Havratel, and the Pilots under their command, and request the pleasure and honour of meeting in the air. In order to save Captain Brumowsky, Rither von Fiala, and Captain Havratel and gentlemen of his party the inconvenience of searching for them, Major Barker and his Officers will bomb Godega aerodrome at 10 a.m. daily, weather permitting, for the ensuing fortnight."

It was in this same period, on the Italian front, that Barker had the honour of flying with the Prince of Wales far behind the Austrian lines. The plane, though not in combat, was heavily fired upon from the ground. Barker, of course, maintained silence about the Prince's flight, but news of the escapade leaked out, partly it would seem through the fact that the Prince, who had seen more than many members of the Staff, revealed a knowledge of the situation behind the enemy lines more comprehensive than was consistent with his nominally shielded rôle.

After Italy, Barker returned to the Western Front, and on the final day of his service there, as Col. Drew describes, fought a fight unique, surely, in all the records of Allied or hostile aviation. Sixty machines to one were the odds he faced and, though this was a combat of man and machine against man and machine, only the story of Sir Richard Grenville and the REVENGE, as some reviewer has previously remarked, seems adequately to rival the story of his battle in the air. With shattered legs and a shattered arm, he kept on fighting, fainting at intervals, but always recovering before his machine had crashed and, even in the last moments of the struggle, driving German planes to destruction.

Few airmen rivalled Lieut.-Col. Barker's record; but among those who in some degree approached it was Major Donald MacLaren, D.S.O., M.C. and Bar, D.F.C., Chevalier of the Legion of Honour, Croix de Guerre, who, from 1912 to 1914, studied electrical engineering at McGill. It is safe to say that few Canadians ever heard of this officer, yet he ranked sixth among British pilots in the war, and fourth amongst the Canadians, with forty-eight German planes and six enemy balloons to his credit. For making known the exploits of such adventurers as this man and his fellow-pilots, Colonel Drew is entitled to the gratitude of the Nation.

All who are interested in the methods of marketing adopted by the Canadian Wheat Pool will enjoy reading the lectures, *Canada and her Wheat Pool*, delivered by Mr. Sydney S. Gampell, M.Sc., Tech., at the City of London College on October 22, 1930, and distributed in Canada by Dawson Richardson Publications, Limited, Winnipeg; price 25 cents.

These lectures, delivered by a well-known economist in the Old Country, were first published in the *Grain Trade News* under the title "Pools and Combines in the Grain Trade," but as this title seemed unsatisfactory, the present booklet bears a name chosen by the author to convey more definitely the subject discussed in its pages.

Without equivocation, Mr. Gampell finds the methods of the Wheat Pool seriously at fault, and its hopes of regulating the world-wide price of wheat to have been based upon ignorance of economic laws and a willful blindness to all warnings of impending disaster. It need not be inferred that Mr. Gampell's arguments and inferences are entirely unanswerable; advocates of the Wheat Pool policy might, indeed, criticize many severely; but there is no doubt that he has marshalled his facts convincingly and, to use a popular phrase of the day, has "sold" his ideas to many of the leading men in the grain trade in Canada.

While it is impossible in a brief review to convey even an outline of Mr. Gampell's arguments, some impression of the scope of the material in his pamphlet is conveyed by his chapter headings, among which are "Development of Grain Production in Western Canada and of the Canadian Wheat Pool;" "Orderly Marketing;" "Juggling with the Carryover;" "Argentine Competition with Canadian Wheat;" and "The Magnitude of the Failure to Date."

It is always easy to be wise after the event, and the charge that Mr. Gampell is doing so has been levelled. The charge has no value as a criticism of his work, but it is of interest to note that he has foreseen the possibility of its being advanced and has carefully called attention to the fact that warnings before the storm were not uncommon or inaudibly voiced. In this connection, he refers particularly to the opinion of the Food Research Institute of Stanford University, California, that even "dumping" in its most objectionable form is preferable to increasing the carryover as a means of giving psychological improvement to the market. Increasing the carryover was the policy adopted by the Canadian Wheat Pool and it has led in the present instance, as Mr. Gampell argues it must almost inevitably lead, to financial disaster.

Whatever one's opinions on the Wheat Pool may be, whether one is in close touch with the situation, or singularly uninformed, it would seem that through the reading of this concise pamphlet information of real value can be obtained.

R. C. F.

Friends

Good friends, we claim to be,
Yet here we live a street or two apart,
And never see each other.
Our time is spent
Beyond our working day
In meeting people
Whom we scarcely know,
And care for less.
The social round, we say,
Is vain and stupid;
This dinner bores us,
We wonder why we go.
But we are certainly too busy
To see and talk with friends,
We stopped that long ago.

—FRANCES R. ANGUS

Charles Thompson Noble

By Stephen Leacock

DR. CHARLES THOMPSON NOBLE, of Sutton village, beside Lake Simcoe, in Ontario, has the honour of being the oldest surviving ex-student of McGill. He was born on February 5th, 1831, in Markham, Ontario, and entered the Medical School of McGill in 1853, where he spent two years, afterwards completing his course in the United States. He has spent his entire active life in general practice at the village of Sutton, in the Lake Simcoe district, and has been a splendid type of the old-style country doctor, working on his own responsibility, remote from the help of colleges, hospitals, and consultations, and performing by himself, as necessity compelled, every operation that had to be undertaken.

He was a man of extraordinary energy and personality, tireless in his profession and in his favourite sport of fishing. When well past ninety years of age, he enjoyed as keenly as ever the winter fishing on Lake Simcoe, and would walk gaily two or three miles out on the ice to his fish house, where he would display the full art of an adept in spearing lake trout.

Dr. Noble's only son, who still has the good fortune at the age of sixty-four to be called "Dr. Charley Noble, Junior," is himself a graduate of the McGill Medical School of the Class of 1890. After spending some time in study abroad, he followed in his father's footsteps, and now carries on the family practice in the same sequestered village.

Among the patients of the senior Dr. Noble fifty years ago were my brothers and sisters and myself, my family living upon a farm four miles from the village, in a seclusion compared to which Sutton village was metropolitan in its life and gaiety. Another child of the period on a nearby farm, cared for by the old doctor (he was called "old" even then), was the present Sir George Badgerow, now a distinguished ornament of Harley St., London, and another still, Dean Kaye, of the Faculty of Arts of the University of Iowa.

Dr. Noble, senior, is at present in his one hundred and first year. Within the last twelve months his sight has gone, and his hearing is now faint, but his mind is as active and his spirit as stout as ever. On the occasion of his retirement from active practice a few years ago, I wrote in his honour for an American medical journal the following sketch, which *The McGill News* is kind enough to reprint herewith:

We lived far back in the country, such as it used to be in Canada, before the days of telephones and motor-cars, with long, lonely roads and snake fences buried in deep snow, and with cedar swamps where the sleighs could hardly pass two abreast. Here and there, on a winter night, one saw the light in a farmhouse, distant and dim.

Over it all was a great silence, such as people who live in the cities can never know.

And on us, as on the other families of that lonely country-side, there sometimes fell the sudden alarm of illness, and the hurrying drive through the snow at night to fetch the doctor from the village, four miles away.

My elder brother and I—there was a long tribe of us, as with all country families—would hitch up the horse by the light of the stable



CHARLES THOMPSON NOBLE

Who, on February 5th, 1931, completed the one hundredth year of his life, and is the oldest living past student of McGill.

lantern, eager with haste and sick with fear, counting the time till the doctor could be there.

Then out into the driving snow, urging the horse that knew by instinct that something was amiss, and so mile after mile, till we rounded the corner into the single street of the silent village.

Late, late at night it was—eleven o'clock, perhaps—and the village dark and deep in sleep, except where the light showed red against the blinds of the "Surgery" of the doctor's rough-cast house behind the spruce trees.

"Doctor," we cried, as we burst in, "hurry and come. Jim's ill—"

I can see him still as he sat there in his surgery, the burly doctor, rugged and strong for all the fifty winters that he carried. There he sat playing chess—always he seemed to be playing chess—with his son, a medical student, burly and rugged already as himself.

"Shut the door, shut the door!" he called. "Come in, boys; here, let me brush that snow off you—it's my move, Charlie, remember—now, what the devil's the matter?"

Then we would pant out our hurried exclamations, both together.

"Bah!" he growled, "ill, nothing! Mere belly ache, I guess."

That was his term, his favourite word, for an undiagnosed disease—"belly ache." They call it supergastral æsthesia now. In a city house, it sounds better. Yet how we hung upon the doctor's good old Saxon term, yearning and hoping that it might be that.

But even as he growled the doctor had taken down a lantern from a hook, thrown on a huge, battered fur coat that doubled his size, and was putting medicines—a very shopful it seemed—into a leather case.

"Your horse is done up," he said. "We'll put my mare in. Come and give me a hand, Charlie."

He was his own ostler and stable-man, he and his burly son. Yet how quickly and quietly he moved, the lantern swinging on his arm, as he buckled the straps. "What kind of a damn fool tug is this you've got?" he would say.

Then, in a moment, as it seemed, out into the wind and snow again, the great figure of the doctor almost filling the seat of the cutter, the two of us crushed in beside him, with responsibility, the unbearable burden, gone from us, and renewed comfort in our hearts.

Little is said on the way: our heads are bent against the storm: the long stride of the doctor's mare eats up the flying road.

Then as we near the farmhouse and see the light in the sickroom window, fear clutches our hearts again.

"You boys unhitch," says the doctor. "I'll go right in."

Presently, when we enter the house, we find that he is in the sickroom—the door closed. No word of comfort has come forth. He has sent out for hot blankets. The stoves are to be kept burning. We must sit up. We may be needed. That is all.

And there in that still room through the long night, he fights single-handed against Death. Behind him is no human help, no consultation, no wisdom of the colleges to call in; only his own unaided strength, and his own firm purpose, and that strange instinct in the fight for a flickering life, that some higher power than that of colleges has planted deep within his soul.

So we watch through the night hours, in dull misery and fear, a phantom at the window-pane: so must we wait till the slow morning shows dim and pale at the windows.

Then he comes out from the room. His face is furrowed with the fatigue of his long vigil. But as he speaks, the tone of his voice is as that of one who has fought and conquered.

"There—he'll do now. Give him this when he wakes."

Then a great joy sweeps over us as the phantom flees away, and we shudder back into the warm sunshine of life, while the sound of the doctor's retreating sleighbells makes music to our ears.

. . . .

And once it was not so. The morning dawned, and he did not come from the darkened room: only there came to our listening ears at times the sound of a sob or moan, and the doctor's voice, firm and low, but with all hope gone from it.

And when at last he came, his face seemed old and sad as we had never seen it. He paused a moment on the threshold, and we heard him say, "I have done all that I can." Then he beckoned us into the darkened room, and, for the first time, we knew Death.

. . . .

All that is nearly fifty years ago.

They tell me that, since then, the practice of medicine has been vastly improved. There are specialists now, I understand, for every conceivable illness and for every subdivision of it. If I fall ill, there is a whole battery of modern science to be turned upon me in a moment. There are X-rays ready to penetrate me in all directions. I may have any and every treatment—hypnotic, therapeutic or thaumaturgic—for which I am able to pay.

But, oh, my friends! when it shall come to be your lot or mine to be ill and stricken—in the last and real sense, with the Great Fear upon us, and the Dark Phantom at the pane—then let some one go, fast and eager—though it be only in the fancy of an expiring memory—fast and eager, through the driving snow to bring such a man as this, and such a hand clasp as his, in parting greeting to our bedside.

Sir Herbert Holt's Tribute

Dear Professor Leacock,

I am delighted to hear that you are writing about Dr. Charles Thompson Noble, whom I remember very well back in 1877, when I was the engineer of the first railway that entered Sutton. The Doctor was then an outstanding figure in the community, who was not only the leading family physician, but was looked up to as a safe advisor whose wise counsel was sought by everybody in the neighbourhood. I am delighted to hear that the Doctor has reached the century mark, and wish him many years more of life.

Yours sincerely,

H. S. HOLT

Births

ABBOTT—In Montreal, on November 26th, to Douglas C. Abbott, Law '21, and Mrs. Abbott, a son.

ABBOTT-SMITH—In Montreal, on December 25th, to Harry B. Abbott-Smith, Sci. '23, and Mrs. Abbott-Smith, a daughter.

ADDY—In Montreal, on January 20th, to Paul H. Addy, Arts '22, and Mrs. Addy, a daughter.

ALLEN—At Kiating, China, in November, to Dr. A. S. Allen, Med. '29, and Mrs. Allen (Winnifred Griffin, Arts '26), a daughter.

CARTWRIGHT—In Montreal, on January 5th, to G. H. Cartwright, Sci. '22, and Mrs. Cartwright, of Quebec City, a daughter.

CHISHOLM—At Havana, Cuba, on December 22nd, 1930, to Hugh A. Chisholm (past student, Law '16), and Mrs. Chisholm, a daughter.

COOPER—In Montreal, on February 13th, to Mr. and Mrs. A. W. Cooper (Louise Swindlehurst, Arts '19), a daughter.

COULTHURST—In London, England, on December 16th, to Rev. Percy and Mrs. Coulthurst (Alice MacKeen, Arts '14), a daughter.

CRAIN—In Rochester, N.Y., on December 1st, to G. Edwin Crain, Sci. '23, and Mrs. Crain, a son.

ELLIS—In Bulawayo, Rhodesia, on February 2nd, to D. Hepburn Ellis, Sci. '25, M. Sc. '26, and Mrs. Ellis (Kathleen Newnham, Arts '22), a daughter.

FORSTER—In Montreal, on October 29th, to Dr. D. S. Forster, Med. '25, and Mrs. Forster, a daughter.

FULLERTON—In Montreal, on January 24th, to Dr. Charles W. Fullerton, Med. '25, and Mrs. Fullerton, a son.

HALL—In Montreal, on February 2nd, to John G. Hall, Sci. '21, and Mrs. Hall, a son.

HOLLING—At Theresa, N.Y., on December 6th, to Dr. Stanley A. Holling, Arts '17, Med. '21, and Mrs. Holling, a son.

HUGHES—In Montreal, on December 29th, to H. Gordon Hughes, Arch. '26, and Mrs. Hughes, a son.

KINGMAN—In Montreal, on December 9th, to Abner Kingman, Arts '09, and Mrs. Kingman, a son.

LEDAIN—In Montreal, on January 31st, to Mr. and Mrs. Victor A. B. LeDain (Marjorie Tait, Arts '23), a daughter.

LEGGO—In San Francisco, on December 21st, to Dr. R. C. Leggo, Med. '19, and Mrs. Leggo, a son.

LYMAN—In Montreal, on January 3rd, W. K. Gordon Lyman, Sci. '21, and Mrs. Lyman, a daughter.

MACDONALD—At Sherbrooke, P.Q., on December 29th, to Mr. and Mrs. J. M. S. Macdonald (Grace L. MacKinnon, B.H.S.'25), a daughter.

MACGILLIVRAY—In Middletown, Conn., on November 1st, 1930, to Dr. Donald J. MacGillivray, Med. '24, and Mrs. MacGillivray, a daughter.

MACLEAN—In Montreal, on November 12th, to A. Reginald M. MacLean, M.Sc., Ph.D., Arts '11, and Mrs. MacLean, twin daughters.

MARTIN—In Montreal, on December 12th, to Erle C. Martin, Arts '20, Law '23, and Mrs. Martin, of Huntingdon, Que., a daughter.

MCCALL—In Montreal, on November 5th, to G. Ronald McCall, Arts '21, and Mrs. McCall, a son.

MCNABB—In Ottawa, on December 13th, to Dr. A. M. McNabb, Med. '22, and Mrs. McNabb, a daughter.

PACKHAM—In Toronto, on October 3rd, 1930, to James McLeod Packham, Com. '24, and Mrs. Packham, a son.

SMITH—In Montreal, on February 1st, to A. I. Smith, Arts '19, Law '21, and Mrs. Smith, a son (premature).

STREAN—In Montreal, on February 9th, to Dr. George Strean, Arts '18, Med. '21, and Mrs. Strean, a daughter.

TEAKLE—In Montreal, on November 8th, to H. P. Teakle, Arts '27, and Mrs. Teakle, a daughter.

VEITH—In Montreal, on December 2nd, to Dr. G. Selwyn Veith, Dent. '21, and Mrs. Veith, a daughter.

VINEBERG—In Montreal, on December 2nd, to Solomon Vineberg, Arts '06, Law '16, and Mrs. Vineberg, a daughter.

WIGGS—In Montreal, on November 7th, to G. Lorne Wiggs, Sci. '21, and Mrs. Wiggs, a son.

YOUNG—At Iroquois Falls, Ont., on November 30th, to Dr. H. Maitland Young, Med. '19, and Mrs. Young, a son.

Marriages

CAINE—In New York, on November 26th, 1930, Miss Mona Margaret Caine, Arts, '27, and John Joseph Kirwan.

CASTLE—In Calgary, Alberta, on July 21st, 1930, Miss M. C. Lurton and William F. Castle, Sci. '28.

CUSHING—In Montreal, on December 3rd, Miss Ruth Frosst and Dougall Cushing, Arts '07, Law '10, both of Montreal.

KNOWLES-ROBERTS—In Toronto, on December 30th, 1930, Miss Dorothy Roberts, Arts '27, and E. Clifford Knowles, M.A. (McGill), of Bradford, England.

MCGILL—At Zionsville, Ind., on November 27th, Miss Geneva Cutts and Dr. Charles Sherlock McGill, Med. '23.

PEAKE—In Marbleton, P.Q., on December 23rd, 1930, Miss Edith Eleanor Peake, B.Sc., '29, and Reginald Lewis Bishop.

ROBINSON—On December 6, in Montreal, Miss Catherine Lindsay Ferguson, of Chance Harbour, New Glasgow, N.S., and Dr. Stewart Alton Robinson, Dent. '26, of Montreal.

TAYLOR—In Ottawa, on December 15th, 1930, Miss Lottie E. Frost and the Reverend Ernest Manley Taylor, Arts '75, M.A. '82.

URQUHART—In Edmonton, Alberta, on December 1, Miss Lenora Hall and Dr. James Alfred Urquhart, Med. '15, of Aklavik, N.W.T.

QUEBEC

The Province of Progress and Prosperity

SURPLUSES SINCE 1910

1910	$ 944,189.16
1911	607,844.95
1912	683,428.98
1913	428,752.14
1914	376,008.80
1915	887,410.03
1916	211,294.69
1917	533,440.61
1918	2,134,558.28
1919	295,221.02
1920	951,910.50
1921	1,230,433.05
1922	5,033,419.45
1923	1,444,365.71
1924	1,303,440.17
1925	743,136.57
1926	1,520,146.75
1927	2,846,294.00
1928	2,986,557.70
1929	5,011,795.62
1930	4,210,230.52

NET FUNDED DEBT at 30th June, 1930
$54,022,526.84 or $20.00 per capita



Photo by courtesy of the Associated Screen News

THE UNIVERSITY CAMPUS IN SPRING

To the right of the Redpath Museum appears the tower of the Ross Memorial Pavilion, Royal Victoria Hospital, and to the right again the roof peaks of the new pumping station built by the City of Montreal on the lower bank of the McTavish Street and Pine Avenue Reservoir.

University News and Notes

The Faculty of Engineering

Following a meeting of the Corporation of the University on Wednesday, February 11th, it was announced that the Faculty of Applied Science would in future be known as the Faculty of Engineering, and that graduates at the Convocation this spring would receive the degree of Bachelor of Engineering, instead of the old familiar B.Sc. The change, rendered advisable by the number of B.Sc. degrees being granted annually in the Faculty of Arts and Science, is the first alteration in the Applied Science degree since 1899. The first lectures on applied science were delivered in 1856, and the Faculty, with Professor H. T. Bovey as its first Dean, was organized in 1878, the degree awarded at that time being Bachelor of Applied Science, with the privilege of proceeding to a Mastership of Engineering. Under the arrangements now announced, Master of Engineering degrees will be granted in the Faculty of Graduate Studies and Research, but this will not debar a Bachelor of Engineering from proceeding to an M.Sc. degree in any of the branches of pure science.

Rockefeller Grant

Following a meeting of the Board of Directors of the Canadian National Committee for Mental Hygiene, held in December, it was announced that a grant of $50,000 over a term of five years had been made to the Committee by the Trustees of the Rockefeller Foundation. It was further announced that Dr. A. Grant Fleming, head of the Department of Public Health and Preventive Medicine at McGill, had been appointed Medical Director of the Committee for Canada. Apportionment of the grant had not been made at the time the Committee met in December, but it was understood that the leading universities and centres of mental hygiene throughout the Dominion would benefit. The money is to be spent in training advanced students and graduates in the special field of mental health.

Graduates' Employment Bureau

Early in January, Gordon B. Glassco, Executive Secretary of the Graduates' Society, announced that an Employment Bureau for members of the Society, and for all graduates and past students of McGill, had been opened and was in operation. Technically, such a bureau has existed since 1921; but, through lack of funds, it never operated extensively. Certain moneys now having been made available, the Bureau has been placed in operation, under the supervision of Miss A. D. Donnellan, B.A. Members of the Society and other graduates or past students, to whom the services of the Bureau might prove of assistance, are invited to write to, or otherwise communicate with, the Employment Bureau, c/o The Graduates' Society, McGill University, Montreal.

Sir Ernest Rutherford's Peerage

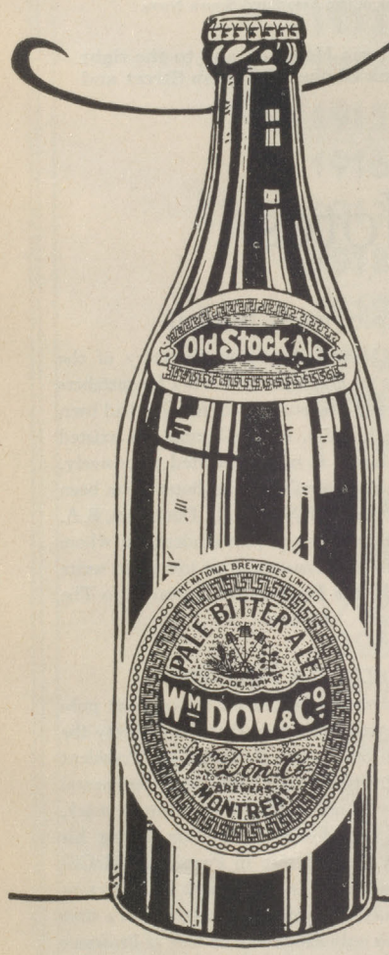
Many Canadians were greatly pleased when, in the honours list published in London on January 1st, it was announced that His Majesty the King had conferred a peerage upon Sir Ernest Rutherford, President of the British Royal Society and Director of the Cavendish Experimental Laboratories, Cambridge University. Lord Rutherford's scientific work, particularly in radio-activity, won world-wide recognition during his tenure of the Macdonald Research Professorship in Physics at McGill from 1898 to 1907, and the University rejoices in the mark of distinction now accorded to him. Very tragically, the honour came to him at a time of great personal bereavement, for his only daughter, the wife of Professor R. H. Fowler, Fellow of Trinity College, Cambridge, died suddenly late in December, following the birth of a child, the fourth of her family.

Status of Women at McGill

In an opinion drawn up at the request of the Acting Warden of the Royal Victoria College, a prominent legal firm in Montreal defines the vexed question of the exact status of women students at McGill. The



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Old Stock Ale

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view that students of the Royal Victoria College were not members of the University, but were "affiliated" with it through enrollment in the R.V.C., which had on occasions been publicly expressed, receives short shrift in the legal opinion now advanced, which states in part: "The Founder makes no mention whatsoever of youth, or young men, or women. He founds an university, or college, for the purpose of education or the advancement of learning. No foundation could be more broadly expressed or be more inclusive of all and sundry, of whichever sex, who sought education from our more modern point of view." The statement goes on to say that the Royal Victoria College is not an affiliated college, but definitely a part of McGill.

Alumnae Representatives Thanked

At a meeting of the Editorial Board of *The McGill News* held in December, Dr. H. W. Johnston presented, and Mr. L. N. Buzzell seconded, a motion thanking Mrs. Walter Vaughan and Miss Marion T. Young, the Alumnae Society's representatives on the Board, for the notable co-operation they had extended in producing the magazine throughout the past year. With this resolution, which expressed the unanimous sentiment of the Board, the editor of the *News* requested that his name should be associated.

Research in Applied Science

In an informal address to members of the Montreal Branch of the Engineering Institute of Canada in December, Professor Ernest A. Brown outlined the extraordinary variety of the research work which departments of the Faculty of Applied Science were constantly undertaking, in response to widespread public demand. Special tribute was paid in the brief address to the work of the late Dean H. M. MacKay, in advancing knowledge of the welding of structural beams; to that of Professor R. H. Patten, in the study of insulation; to Professor C. M. McKergow's work, in the insulation of extended pipe lines; and to that of Professor C. V. Christie, in many branches of electrical engineering.

Assistant Professor of Physics

Succeeding the late Dr. E. S. Bieler as Assistant Professor of Physics, Dr. William H. Watson, of the Cavendish Laboratories, Cambridge University, will come to McGill at the opening of the next University session. Dr. Watson, who has had notable success in his work and teaching at Cambridge, was recommended for his new post by Lord Rutherford, formerly Sir Ernest Rutherford, one of the most widely-known scientists in the long list of those who have brought distinction to McGill.

Treasure for the Gest Library

Additions to the Gest Chinese Research Library in the past few weeks included 225 works in more than 3,400 volumes, bringing the total number of volumes in the library's shelves to approximately 115,400. Among the latest additions are a fine series of works on mathematics and astronomy, an equally interesting series dealing with the practice of medicine, and a number of volumes on philosophy. The most outstanding rare work added to the library in the past two years is a set of the Kanjur, in Mongol script, hand-written in red on cream-coloured paper. The work on these volumes was carried out for the Emperor Ch'ien Lung in the decade between 1740 and 1750 A.D.

Statue of Buddha in Bronze

An interesting addition to the oriental collection at McGill was made when the Gest Chinese Research Library acquired a life-sized statue of Buddha, cast in bronze in China more than 350 years ago. The statue, weighing some 250 pounds, stands on a wooden base, and is given an unusually impressive effect by a lighting device, which bathes the figure in a soft, green glow.

McCord Museum Catalogue

A catalogue and directory recently issued by the McCord National Museum reveals the wealth and variety of specimens which this museum contains. Rooms A and B, it is shown, are devoted to exhibits of Eskimo material; Room C, to the French régime in Canada; Rooms E and F, to the early missions in Canada and to articles associated with the Royal Family of England; Rooms G, H, and I, to war collections, relating respectively to the American War of Independence, the War of 1812, and Wolfe's conquest of Quebec; Room J, to McCord family relics; Room K, to the history of Montreal and Quebec, with special reference to James McGill, Founder of the University, and Sir William Dawson, former Principal; and Room L, to Arctic exploration and Canadiana of general interest.

Scottish Scholar is Appointed

Dr. Oliver Shaw Rankin, M.A., B.D., D.Litt., a graduate of the University of Edinburgh, where he won the Dunlop Scholarship in Hebrew, Syriac, and Arabic, the highest honour obtainable in Semetics, reached Montreal in January, and has assumed duties at the United Theological College, University Street. The thesis, which recently gained for Dr. Rankin a Doctorate of Literature in his old university, will shortly be published in Scotland.

Ph.D. Course in Entomology

Arrangements, as a result of which Macdonald College will offer a Ph.D. degree in Entomology, were approved by the Corporation of the University in mid-February. Previously, an M.Sc. degree had been obtainable in this subject, but not a Ph.D. Professor W. H. Brittain, head of the Department of Entomology at Macdonald College, states that there is a growing demand for competent research workers in this subject, and the inauguration of the Ph.D. course is considered opportune and timely. The course will involve two years' work at Macdonald College, with one year (usually the second of the three) at some other recognized institution. The equivalent of two summer sessions of research in a government laboratory, or other approved centre, will also be required.

Graduates' Sunday Lectures

Under the auspices of the Graduates' Society, four Sunday afternoon lectures were delivered in Moyse Hall in January and February. The success of a similar series of lectures last year induced the Society to repeat the experiment, and again a most interesting and varied programme was presented, Professor Huskins, of the Department of Genetics, lecturing on "Crime as Fate," and touching upon heredity and environment as factors in criminal activities; Professor Woodhead, lecturing on "Plato as a Literary Artist;" Professor Brunt, of Macdonald College, on "The Arthurian Legends;" and Professor Traquair, on "Old Houses and Furniture of Quebec."

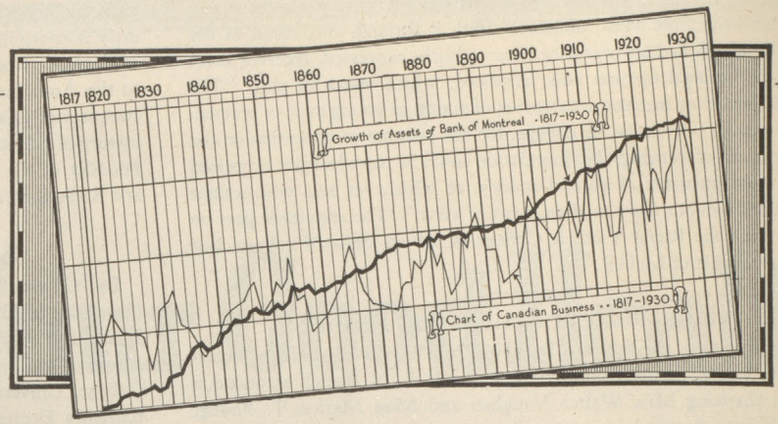
Graduates' Society Smoker

On January 28th, with the Chancellor of the University delivering the principal speech of the evening, the second annual graduates' smoker was held in the McGill Union. G. B. Glassco, Executive Secretary of the Society, and officers of the Montreal Branch were responsible for the presentation of an excellent programme, undergraduate boxers, entertainers, and musicians affording co-operation of a type and quality that left little to be desired. A feature of the evening was the Chancellor's announcement that physicians in London, on examining Sir Arthur Currie, had confirmed the fact that all trace of the illness from which he suffered two years ago had disappeared.

The Ottawa Valley Branch

At the annual meeting of the Ottawa Valley McGill Graduates' Society, held in the Chateau Laurier, Ottawa, on the evening of February 10th, Percy D. Wilson, Arts '10, was elected President, to succeed G. Gordon Gale, Sci. '04, M.Sc. '05; P. D. Ross was elected Honorary President, and a full slate of other officers was appointed. H. M. Jaquays, President of the Graduates' Society of McGill University, delivered the main speech of the evening, outlining some events in the history of McGill, referring to the University's present manifold activities, and congratulating the Ottawa Valley Society, which has always been in the forefront of McGill graduate development.

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Death of Dr. A. W. Thornton

Graduates in the Faculty of Dentistry, and many others, heard with deep regret, in February, of the death of Dr. Alexander Walker Thornton, a graduate of the Royal College of Dental Surgeons, Toronto, who in 1913 came to McGill as head of the Department of Dentistry in the Faculty of Medicine, and, upon the organization of a Faculty of Dentistry, became its first Dean. Dr. Thornton, who was also noted for his part in the formation of the Canadian Army Dental Corps, retired from active work in 1926, and, after a protracted illness, died in Montreal on February 11th.

Unemployment to be Studied

Under the terms of a grant recently announced by the Rockefeller Foundation, McGill receives $110,000 for the prosecution of research in problems of Canadian social science. The work is to centre particularly in Montreal, and the University has announced that the first and principal research to be undertaken will deal with the problem of unemployment. Dr. L. C. Marsh, who has conducted work of this nature in London, England, will be in charge of the work in Montreal. He is a native Englishman, and a graduate of the University of London's School of Economics. At McGill, he will serve in the Department of Economics, under Professor Stephen Leacock. The Rockefeller Foundation's generous gift corresponds in its main features with grants made recently for similar purposes to Yale University and the University of Chicago.

R.V.H. Internes' Residence

A residence for internes of the Royal Victoria Hospital, Montreal, the first of its kind in Canada, was formally opened on January 29th by the President of the Hospital, Sir Herbert Holt, in the presence of the Chancellor of the University, the Dean of the Faculty of Medicine, and a distinguished group of citizens. In the new building, which stands on the site of the former Ward S, once an isolation building, 42 house doctors will each have a room to himself, with common rooms available for reading, writing, billiards and recreation. The new quarters for the resident staff fill a long-realized need; and the provision of them will have the further effect of adding appreciably to the space available for the general purposes of the hospital.

Peterson Memorial Scholarship

Following a meeting of the Governors of the University held in December, it was announced that a bequest of $11,000 from the late Col. W. G. Peterson had been received. Interest on the amount, to the value of approximately $550 a year, will be used to create the Peterson Scholarship in Classics, in memory of Colonel Peterson's father, the late Sir William Peterson, former Principal of the University, and $50 a year will be provided to purchase books, these being presented as an annual prize in literature.

A Memorial Supplement

Deep affection for the late Lieut.-Col. William Gordon Peterson, D.S.O., Arts '06, son of Sir William Peterson, former Principal of McGill, is revealed in a Memorial Supplement to the issue of *College Echoes*, of St. Andrew's University, Scotland, published on October 29th, 1930. In this supplement many of Will Peterson's friends and colleagues have written, none more feelingly than Professor A. Blyth Webster, of the Department of English at St. Andrew's, who says, in part: "If to this record, which is his, I add a few words of my own, it is that the English Department may not be absent from any honours that are paid him, and that my name may be dignified for a little by being linked with his. He was the most chivalrous, most generous, most forgiving man I have known. *Justorum animae in manu Dei sunt, nec attinget eos cruciatus.* Will Peterson was of the just: we need have no fears for him."

A Woodwind Quintet Formed

The formation and public appearances of the McGill Conservatorium of Music's Woodwind Quintet this winter provided music lovers in Montreal with no little pleasure and satisfaction. The quintet, comprising flute, oboe, clarinet, horn, and bassoon, as stated by critics in the city's press, "is a valuable addition to the musical forces of Montreal."

Protestant Education in Quebec

In a carefully-prepared report presented at a meeting of the Province of Quebec Protestant Committee on Education, held in the McGill Medical Building on January 9th, Dr. W. P. Percival, Director of Protestant Education, recommended changes of far-reaching importance in the school curriculum of the Province. While it is not possible to summarize all the recommendations effectively, an impression of their scope can be gained from the following: (1) Division of high school courses into a "general" course leading to a School Leaving Certificate, and an "academic" course leading to matriculation, with no difficulty in transfer from one to the other; (2) Modernization of instruction in Arithmetic; (3) Replacement of Drawing as a subject by more comprehensive instruction leading to better appreciation of Art; (4) The subject Grammar to be replaced by a more inclusive subject Language; (5) The addition of a subject to be known as Extra English in high school courses; and (6) The adoption of new text books in six of the subjects now studied.

Canadian University Statistics

Figures with regard to the universities of Canada, issued this winter by the Dominion Bureau of Statistics and quoted in the daily press, reveal some contrasts of more than usual interest. Thus McGill is stated to be wealthier in capital than the University of Toronto and the University of Montreal combined, with total assets of $27,679,082, compared with Toronto's $15,753,028 and Montreal's $6,111,985. In the realm of revenue and expenditure, however, the situation changes, Toronto showing revenue of $2,972,520, McGill of $2,141,729, and Montreal $312,486. In expenditure, Toronto also led with $3,120,513, to McGill's $2,399,270 and Montreal's $353,637. Total enrollments at the three universities are given as: Montreal (including affiliated colleges) 12,318, Toronto 10,604, and McGill 2,792. To instruct these students, Montreal employs 651 full-time teachers, Toronto employs 747, and McGill 429.

A Tribute from France

Under a heading, "The Best in Magazines," the fortnightly *L'Information Universitaire*, of Paris, France, reviewed on January 10th, the London *Fortnightly Review*, the American *National Geographic Magazine*, the London *World To-Day*, and the December number of *The McGill News*. Those responsible for the production of this quarterly were interested to find the *News* grouped thus with a number of the leading magazines of the English-speaking world, and the generous comment of the Parisian reviewer was appreciated most sincerely. *L'Information Universitaire*, in another column, reprinted in French a short paragraph from our "University News and Notes," announcing the appointment of Dr. Kiang Kang-hu as head of McGill's Department of Chinese Studies, the first department of its kind in Canada.

Seventy Years Ago

Seventy years ago, on March 12, 1861, the McGill University snowshoe races were held on the College campus. Memories of names famous at McGill, and distinguished later in the life of the Dominion, are recalled by an account of the races included in Mr. Hugh W. Becket's *History of the Montreal Snow Shoe Club*, published in 1882, the winners of races including C. Peers Davidson, later Sir Charles Peers Davidson, Arts '63, Law '63, LL.D. '12, and D. R. McCord, Arts '63, Law '67, M.A. '67, LL.D. '21, founder of the McCord National Museum. The final half-mile race, run, it may be noted, in trenchers and gowns, was won by Mr. McCord in 3½ minutes, 26 seconds apparently representing the handicap of clothing and headgear, for Richard Tate won the unencumbered race of the same distance in 3 minutes and 4 seconds.

The Graduates' Society records with deep regret the deaths of the following Alumni:

AMI, DR. HENRY MARC (Arts '82, M.A. '85), on January 4, 1931, at Mentone, France.

BROSSARD, DR. JEAN BAPTISTE J. (Med. '75), on June 23, 1928, at Laprairie, P.Q.

CLARK, HENRY DISBROW (Vet. '95), on February 3, 1931, in Fitchburg, Mass.

FALKNER, DR. ALEXANDER (Med. '66), on February 20, 1931, in Lancaster, Ontario.

FAY, JOHN E. (Law '78), on January 7, 1931, at Knowlton, Que.

FIELD, DR. BURTON RAWORTH (Med. '06), on February 6, 1930.

GOYETTE, JOSEPH HENRI ADOLPHE, K.C. (Law '80), on November 25, 1930, at Hull, Que.

HOPE, DR. JAMES THOM (Med. '01), on January 4, 1931, at Alexandria, Ont.

HOWEY, DR. WILLIAM HARVEY (Med. '78), in March, 1928, at Sudbury, Ont.

HURD, FREDERICK WARREN (Arts '26, Law '30), on December 30, 1930, in Montreal, P.Q.

IRVEN, DR. JOHN JAMES (Med. '11), on December 6, 1930, in Montreal, P.Q.

KENNEDY, DR. GEORGE LIONEL DENT (Med. '15), on November 24, 1930, in Hartford, Conn.

LEBEUF, THE HON. LOUIS CALIXTE (Law '73), on December 7, 1930, in Montreal, P.Q.

LONERGAN, MICHAEL STEPHEN (Law '71), on February 11, 1931, in Montreal, P.Q.

MACLEOD, THE REVEREND JOHN B. (Arts '99), on January 10, 1931, in Montreal, P.Q.

MCCARTHY, GEOIGE ARNOLD (Sci. '98), on November 13, 1930, in Toronto, Ont.

MCINTOSH, MRS. DOUGLAS (Bella Marcuse, Arts '00, M.Sc. '03), on February 10 1931, in Halifax, N.S.

OLIVER, DR. ALFRED JACKSON (Med. '90), on November 16, 1930, at Cowansville, Que.

OLIVER, CARLTON JAMES (past student, Med.), on January 7, 1931, in Mansonville, P.Q.

PELLETIER, ALEXI DESIRE (Arts '06, M.A. '07, Law '08), on January 28, 1931, in Montreal, P.Q.

PULFORD, DR. FIEDERICK W. (Med. '80), recently, in Detroit Mich.

SHANKS, DR. ALBERT L. (Med. '89), accidentally, on January 28, 1931, at Mileage 114, Hudson's Bay Railway.

SMITH, DR. EDWARD WEIR (Med. '82), on October 8, 1930, at Meriden, Conn.

STOWELL, DR. FRANK EDGAR (Med. '03), on August 31, 1930, in Worcester, Mass.

WEBSTER, DR. ROBERT EDWARD (Med. '91), on February 9, 1931, near San Diego, Cal.

As the result of correspondence since the last issue of the *News* appeared, the Graduates' Society learned with regret of the passing some time ago of two senior physicians, Dr. J. B. Brossard, of Laprairie, P.Q., and Dr. W. H. Howey, of Sudbury, Ontario, who, in their respective communities had for many years practised faithfully in their profession. Nor, unfortunately, were these well-known graduates the sole representatives of the Faculty of Medicine of whose passing news was received, for the Society was notified of the deaths of Dr. B. R. Field, of the Class of '06, Dr. James T. Hope, of Alexandria, Ontario, who died on January 4th, Dr. Alfred Jackson Oliver, of the Class of 1890, who died in Cowansville in November, and Dr. J. J. Irven, a prominent surgeon on the staff of the Montreal General and Western General Hospitals, who, after operating in the course of his routine duties on the afternoon of December 6, 1930, was taken suddenly ill, and, to the deep regret of a wide circle of friends, died at his home a few hours later.

Equally tragic was the death of Dr. A. L. Shanks, of the Class of '89, who was accidentally killed on January 28th, by a fall from a train at Mileage 114 of the Hudson's Bay Railway. Dr. F. W. Pulford, who for forty-five years had practised in Detroit, Michigan, is another senior physician whose passing leaves a place in the regard of his patients and the medical profession which will not easily be filled.

In addition to news of Dr. Pulford's death, notification has been received from points in the United States of the deaths of three well-known physicians of New England, Dr. G. L. D. Kennedy, of Hartford, Conn., Dr. E. W. Smith, of Meriden, Conn., and Dr. F. E. Stowell, of Worcester, Mass. New England also lost a veterinary surgeon of high repute when Dr. H. D. Clark, of the Class of '95, died at his home in Fitchburg, Mass., on February 3rd. From the United States, there came a few days later in February news of the death in San Diego, California, of Dr. R. E. Webster, but in this instance the deceased physician was not resident south of the border, but on a visit from the scene of his professional activities in Ottawa. The death of a passed student in Medicine, C. J. Oliver, who diedin Mansonville, P.Q., has also been recorded.

In the Faculty of Arts, the intellectual and scientific life of the Dominion suffered a severe loss in January, when Dr. H. M. Ami, one of Canada's noted geologists, died in France, where, as Founder and Chief of the Canadian School of Pre-History, he was conducting ethnological research. At McGill in the years immediately preceding 1882, Dr. Ami was a notable scholar and athlete; in later years his scientific accomplishments and writings were widely recognized both in Canada and abroad.

The Reverend J. B. McLeod, of the Class of '99, whose death occurred in Montreal just one day after that of Dr. Ami, was another graduate whose loss has deprived the Faculty of Arts of a distinguished alumnus. News was also received of the death in Halifax, on February 10th, of Mrs. Douglas McIntosh (Bella Marcuse), who graduated in Arts in 1900, and proceeded to a Master's degree in Science in 1903. Mrs. McIntosh, the wife of a former professor of chemistry at Dalhousie University, graduated at McGill with honours in philosophy and geology, was for a time a demonstrator in the Department of Chemistry, was one of the founders of the Themis Club, Montreal, and was widely recognized as one of the most outstanding and devoted women graduates of the University.

In Law, too, the University recently has suffered the loss through death of outstanding graduates, the number including, M. S. Lonergan, Law '71, who died in Montreal on February 11th, J. E. Fay, of the Class of '78,

who died in Knowlton, P.Q., in January; J. H. A. Goyette, K.C., a graduate two years later, whose death occurred in Hull, P.Q., on November 25th; F. W. Hurd, a young lawyer of unusual promise, who died, following an operation in the Royal Victoria Hospital, Montreal, on December 30th; the Honourable L. C. Lebeuf, a senior lawyer in the Province of Quebec, who died in Montreal on December 7th; and Alexis D. Pelletier, Arts '06, M.A. '07, Law '08, who died in Montreal on January 28th. Through the death of these graduates, and that of G. A. McCarthy, Science '98, which was mentioned in the December issue of the *News*, the University has suffered losses more severe than brief notice, such as is possible here, can convey or even remotely indicate.

Just as this issue goes to press the University heard with sorrow, in which many in Canada will share, of the death in Lancaster, Glengarry County, of Dr. Alexander Falkner, one of the most widely known physicians in Ontario, who graduated at McGill sixty-five years ago, and died while in his 90th year. Through his death McGill loses one of the few surviving men who have practised medicine in the Dominion since the days of Confederation, and who, through the unostentatious measure of their high accomplishment, have amply repaid their University for the skill with which she endowed them.

Personals

The *News* welcomes from graduates personal items for inclusion in these columns. Press clippings or written notices should be sent to H. R. Morgan, Esq., c/o Recorder Printing Company, Brockville, Ontario; or to the Executive Secretary, Graduates' Society, McGill University, Montreal.

NORMAN L. HIGINBOTHAM, Med. '26, formerly on the staff of the Memorial Hospital, New York, is now serving in the Hospital for Ruptured and Crippled, New York.

FRED. S. BAIRD, Med. '13, was elected President of the Bay County Medical Society for 1931. This Society includes the upper half of the lower peninsula of Michigan.

C. D. CHEASLEY, Arts '28 (M.A. '29), has joined the staff of Stevenson & Scott Ltd., Advertising Agency of Montreal, as Statistician and Director of Research and Survey Work.

DR. GEORGE SHANKS, Arts '04, Med. '08, who, after service overseas, held the post of Professor of Pathology and Bacteriology in the Medical College of Bengal, Calcutta, India, for nine years, has recently assumed duties as Pathologist and Bacteriologist in the Toronto Western Hospital.

J. C. KEMP, Sci. '08, was in January elected to a seat on the Municipal Council of the City of Westmount, P.Q.

Among the new King's Counsels appointed by the Government of the Province of Quebec in January were the following graduates in Law of McGill: J. D. KEARNEY, '20, R. C. HOLDEN, Jr., Arts '14, and G. B. FOSTER, '20, of Montreal; and W. F. BOWLES, Law '19, of Three Rivers, P.Q.

DR. G. R. LOMER, the University Librarian, has been re-appointed a member of the Committees on Code and Ethics and Bibliography of the American Library Association.

MISS ELSIE EPSTEIN, M.A. '29, has been admitted to membership in the Canadian Chartered Accountants' Association. Only once previously has this distinction been gained by a woman applicant from the Province of Quebec.

Students who attended the University about thirty years ago will regret to hear of the death of PROFESSOR MAXIME INGRES, who died in Paris on January 7th. He was at one time Professor of the French Language at McGill, and was well-known for his intellectual abilities and his great skill as an expert swordsman.

Interesting developments in central heating in Winnipeg were announced in press despatches this winter, which stated that, under the direction of J. G. GLASSCO, Sci. '00, M.Sc. '01, a million dollar addition is to be made to the $1,185,000 system now in successful operation.

Among the Rhodes Scholarships announced recently, two have been awarded to students at McGill, KENNETH M. CAMERON being chosen from the Province of Quebec, and JOHN B. WATSON from the Dominion of Newfoundland.

HUGH A. CHISHOLM, past student, Law '16, is now Manager for Cuba of the Sun Life Assurance Company of Canada, with offices in the Royal Bank Building, Havana, Cuba.

In a recent issue devoted largely to articles on the design and construction of the Welland Ship Canal, the *Contract Record and Engineering Review* presented brief biographical sketches of a number of the men whose work has brought this vast undertaking to completion. Among the McGill men mentioned were: E. G. CAMERON, Principal Assistant Engineer on Construction; F. E. STERNS, Sci. '03, Designing Engineer; M. B. ATKINSON, Sci. '04, Structural Engineer; A. L. MUDGE, Sci. '94, Electrical Engineer; and F. C. JEWETT, Sci. '05, Divisional Engineer at St. Catharines, Ontario.

F. W. MACLENNAN, Sci. '98, General Manager of the Miami Copper Company, Miami, Arizona, has been awarded the William Laurence Saunders gold medal by the American Institute of Mining and Metallurgical Engineers, for his outstanding work in bringing to production ore of a grade appreciably lower than could hitherto be mined on an economic basis. The award is a highly coveted honour, held previously by only four men, the number including the President of the United States of America, who received the medal in 1928.

DR. G. W. BAILEY, Med. '07, Medical Inspector of Schools, Department of Health, Province of New Brunswick, has forwarded accurate details about the statue of BLISS CARMAN, LL.D. '21, by Dr. R. TAIT MCKENZIE, Arts '89, Med. '92, LL.D. '21, mentioned in the December issue of the *News*. The statue is to be erected on the Terrace of the University of New Brunswick, immediately in front of the Arts Building, not over the poet's grave, where a memorial is already in existence.

The December issue of *The Trail*, graduate magazine of the University of Alberta, mentions that the University's collection of works of art has been enriched through the presentation, by the Edmonton Academy of Medicine, of a bronze statuette of Tait McKenzie's famous "Athlete." This piece of sculpture is among those illustrated in Mr. Christopher Hussey's *Tait McKenzie, A Sculptor of Youth*, reviewed in the December number of the *News*.

DR. A. GRANT FLEMING, Director of the Department of Public Health and Preventive Medicine at McGill, has been named to succeed Dr. C. M. Hincks as Medical Director of the Canadian National Committee for Mental Hygiene. Dr. C. F. Martin, Dean of the Faculty of Medicine, is the President of the Committee.

N. H. BEATON, Sci. '07, and E. B. RIDER, Arts '08, Sci. '09, are now serving on the Engineering Staff of the Metropolitan Water District of Southern California. K. A. READER, Sci. '14, is with the Southern California Edison Company, in the Department of Engineering Design.

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JOHN GODFREY SAXE, Arts '97, Honorary M.A., 1914, has been appointed Chairman of the Joint Committee of the Bar Association of Greater New York.

The Reverend E. M. TAYLOR, Arts '75, M.A. '82, Permanent Secretary-Treasurer, District of Bedford Branch of the Graduates' Society, who retired last July after 41 years' service as Inspector of Schools, is spending the winter in California with Mrs. Taylor, formerly Miss Lottie Frost, of Ottawa, to whom he was married on December 15th.

DR. JOHN BEATTIE, Associate Professor of Anatomy, is recovering from a fractured leg, the result of a skiing accident in the Laurentians in February.

DR. ALLIE VIBERT DOUGLAS, Arts '20, M.Sc.'21, Ph.D. '26, Lecturer in Astrophysics at McGill, has been appointed a Fellow of the Royal Astronomical Society, of London, England.

DR. HILTON J. MCKEOWN, Med. '26, has been appointed director of the section on diseases of the chest at the Lois Grunow Memorial Clinic, Phoenix, Arizona. The clinic is the $1,000,000 gift of Mr. William C. Grunow, of Chicago.

After having been on the staff since 1919, H. F. ANGUS, M.A., Arts '11, has been appointed head of the Department of Economics at the University of British Columbia. Prof. Angus took his Master's degree at Oxford, after war service in India and Mesopotamia.

J. R. DONALD, Arts '13, Sci. '13, has become the first president of the Canadian Chemical Association, a nation-wide federation of chemical organizations. Mr. Donald is managing director of J. T. Donald & Co., Montreal and Toronto, of which his father, J. T. Donald, Arts '78, was the founder.

PROF. W. V. HOWARD, M.Sc., Arts '16, of the University of Illinois, Urbana, was a delegate to the annual convention of the Geological Society of America in Toronto.

At the age of 76 years, following retirement from the bench of the Supreme Court of Canada, the HON. P. B. MIGNAULT, LL.D., Law '78, has resumed the practice of law in Montreal as a consultant, with offices in the Transportation Building.

After ten years as vicar of St. John's Anglican Church, Peterborough, Ont., REV. DR. R. C. BLAGRAVE, Arts '02, has been appointed rector, to succeed Canon Davidson.

DR. SYDNEY W. BRITTON, Med. '24, is now Professor of Physiology at the University of Virginia.

REV. CHARLES E. JEAKINS, Arts '01, rector of St. Jude's Church, Brantford, Ont., has been created a canon of St. Paul's Cathedral, London, Ont.

FELIX H. WALTER, M.A., Arts '23, is now Associate Professor of French at Trinity College, Toronto, a post he assumed following service on the staff of Queen's University, Kingston.

COLONEL E. G. M. CAPE, D.S.O., Sci. '98, has been appointed Honorary Lieutenant-Colonel of the 2nd Medium Brigade, 2nd Montreal Regiment of Artillery.

REV. E. BRUCE COPLAND, Arts '22, has been recalled from Formosa by the Foreign Missions Board of the United Church of Canada, and will be sent to Honan, China, this year.

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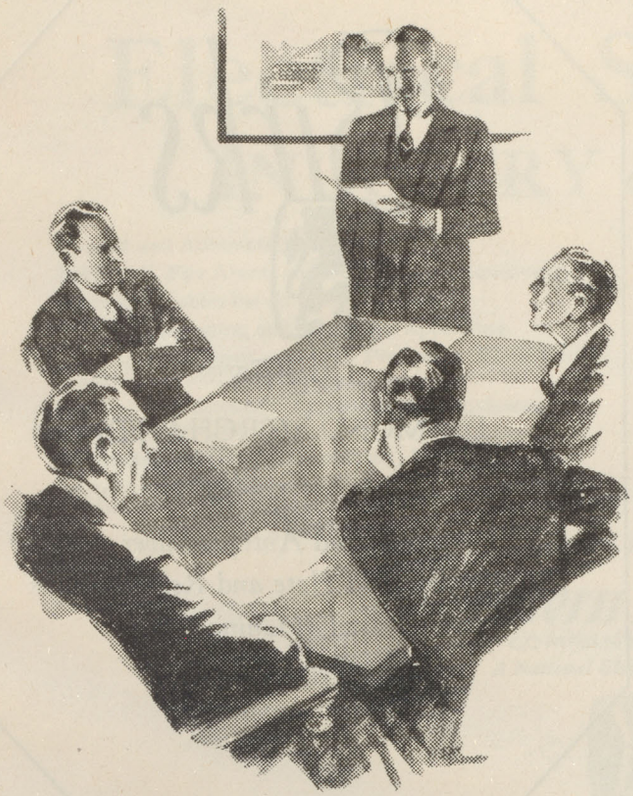
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W. E. C. IRWIN, Sci. '11, has been appointed one of the joint managers of the Montreal office of the Fidelity Insurance Company of Canada.

DR. MILTON L. HERSEY, Sci. '89, has been appointed President of the Canadian Tube and Steel Products, Limited, Montreal.

WALLACE R. HENRY, Law '21, of Montreal, has been appointed a pensions advocate under legislation adopted recently by Parliament.

DR. J. W. BRIDGES, Arts '11, latterly a member of the staff of the University, is, with Mrs. Bridges, spending the winter in research work at the University of Paris.

DR. J. HOWARD MUNRO, Med. '03, Reeve of Maxville, Ont., has been elected Warden of the United Counties of Stormont, Dundas, and Glengarry.

J. S. FARQUHARSON, Sci. '22, who has been supervisor of local service in the General Traffic Department of the Bell Telephone Company of Canada, has been appointed Toll Line Engineer for the same company.

DR. EDWARD B. CHANDLER, Med. '21, has been appointed medical examiner at Montreal for the Bell Telephone Company, succeeding the late Dr. H. F. H. Eberts, Med. '15.

In recognition of service to the Boy Scout Movement, DR. FRANK D. ADAMS, Sci. '78, has been granted a Silver Wolf decoration, the highest honorary award in Scoutcraft.

R. B. CLOUGH, Sci. '17, who has been division traffic engineer, Eastern Ontario Division, Bell Telephone Company, has been appointed district traffic superintendent, Ottawa Suburban district.

A. MURRAY MCCRIMMON, Arts '15, has returned to Canada from Brazil, and has joined the Toronto stock brokerage firm of Somerville, Stratton & Lindsey.

A. G. PENNY, Arts '08, has been re-elected president of the Board of Trade of Quebec City.

E. P. TAYLOR, Sci. '22, who has been vice-president of the Brewing Corporation of Canada, Limited, has been elected president of the company in succession to his father, Lieut.-Col. P. B. Taylor.

DR. F. W. TIDMARSH, Med. '14, has been appointed medical officer at Charlottetown, P.E.I., for the Department of Pensions and National Health.

DR. A. S. LAMB, Med. '17, and DR. CYRIL FLANAGAN, Dent. '23, of Montreal, have been elected members of the Board of Directors of the Boys' Club Federation of Canada.

REV. DR. H. J. KEITH, Arts '99, has resigned the pastorate of St. Andrew's Church, River Heights, Winnipeg, Man., after 12 years of service in that charge.

LAZARUS PHILLIPS, Law '18, of Montreal, has been created a King's Counsel by the Quebec Government.

W. M. COUPER, K.C., Law '02, of Montreal, has been re-elected Grand Master of the Grand Lodge of Quebec, A.F. & A.M.

Alumnæ Notes

The McGill Women's Club of Vancouver, B.C., has the following officers for the present year; President, Mrs. John Soutkin (Agnes B. Balkwill, Arts '14); Vice-President, Mrs. H. I. L. Davis; Secretary, Miss Hazel McLeod, Arts '17; Treasurer, Mrs. John Baird (Hazel McKeon, past student); Executive, Dr. Ethelyn Trapp, Arts '13, Med. '27; Mrs. S. J. Crocker (M. B. Fraser, Arts '06); Mrs. T. E. Price (Lennie Macdonald, Arts '15).

On November 26th, the Club gave a bridge and dance at the Point Grey Golf Club, to take the place of the McGill Graduates' Dance, which has been an annual event for years. Some forty tables were in play, and a series of similar entertainments is contemplated.

The McGill Women's Society of Toronto has the following officers for the present season. President, Mrs. R. O. Daly (Marion McCall, Arts '16); Secretary, Miss Zoe Smith, Arts '15; Treasurer, Mrs. W. E. Macpherson. These three, with Miss Joyce Plumptree, M.S.P.E. '25, were the committee for the Society at the Supper Dance and Bridge given by the McGill Society of Toronto at the Royal York Hotel on February 7th.

1900—Miss Harriet T. Meiklejohn (Morrin College '00), head of the Women's College Hospital, Toronto, has enlisted the support of the McGill Women's Society of Toronto in efforts to raise the funds for a new building more in keeping with the heavy demands on the hospital. These efforts have been successful, and contracts are now let for the first unit of a 200-bed hospital. The building will be erected on a site bounded by Grosvenor and Grenville Streets and Surrey Place. This will be the only hospital in the Dominion entirely staffed by women.

Dr. and Mrs. Charles Eggert (Helen Rorke, M.A.) formerly of Prince Rupert, B.C., are now living in Vancouver, at 6112 Adera Street. Dr. Eggert is specializing in children's diseases.

1901—Mr. and Mrs. Milton Jack (Winifred C. Bennett) are now conducting a gladioli and dahlia farm at Hatzic, B.C. They are frequent visitors to Vancouver, where their son and daughter are attending the University of British Columbia.

1905—Ella L. Smith, M.A., has returned from three years' study abroad, and has been speaking before the Women's Canadian Club and other organizations in Eastern Canada. While abroad, her time was spent mainly in London, though she made trips to Constantinople, Greece, Italy, Corsica, and the South of France, and recently spent four months in Jugoslavia.

1908—Gertrude Boyle, head of the Cataloguing Department of the Toronto Public Library entertained the McGill Women's Society of Toronto last autumn. The guests greatly enjoyed being shown over the new Staff House, a fine old house on College Street, with a splendid hall and staircase, and rooms most pleasantly furnished as a club for the Library women. Dr. George H. Locke, the Chief Librarian, and a former member of the McGill Faculty, was one of the guests.

1913—Mrs. A. L. Burt (Dorothy Duff), is now living in St. Paul, Minn., where her husband has joined the History Staff of the University of Minnesota.

1915—Kathleen O'Meara, who has been teaching for some time in Chilliwack, B.C., is spending a year abroad.

1920—Allie Vibert Douglas, Ph.D., has been made a Fellow of the Royal Astronomical Society of London. Two of her papers on research work on variable stars have recently been published in the Journal of the Society.

1923—Mrs. E. C. Marr (Evelyn Snyder), is returning to Canada shortly from Buenos Aires, Argentina, where her husband has been stationed for some time.

1925—Joyce Plumptree (M.S.P.E), is a student at the Ontario College of Education, and is teaching in the night gymnasium classes at the Central Technical School, Toronto.

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1926—M. Burton (M.S.P.E.), has been appointed to the Physical Education Staff of the West End Y.W.C.A., Toronto.

Alice Westlake (past student, M.S.P.E.), is instructor in Physical Education for the nurses at the Toronto General Hospital.

1927—The Class of R.V.C. '27, held a dinner at the University Women's Club of Montreal on January 5th.

1930—Frances G. Ash and D. M. McNeill are students this year at the Ontario College of Education.

Household Science Graduates' Society

(*Continued from Page 16*)

The realization of the value of women specially trained in the field of Household Science is of comparatively recent occurrence. The rise in standards of living has created the need for more teachers; the increase in the knowledge of foods and nutrition, and their relation to health and efficiency, and to disease, has created the need for the dietitian in social work, and in institutions of all types. It is now fully realized, by all well-organized hospitals, that the trained dietitian can be of invaluable assistance to the physician and to the hospital superintendent, as well as to the patient in the hospital, and, through the clinic, to the patient in the home. The lead of the hospitals is now being followed by many other types of institutions.

The requirements of the well-trained Dietitian, or Household Science specialist, have increased rapidly in the past few years, and a B.H.S., or a B.S. degree, is now almost essential. The American Dietetic Association now accepts as members only graduates of a four-year course.

It is interesting and gratifying to know that the McGill University Household Science Graduates have gone abroad to widely separated points, and in varied fields of work. Some of the places at which McGill University has been represented are:

Hospitals—Boston Dispensary; Boston Civic Hospital; Royal Victoria Hospital, Montreal; Montreal General Hospital; Presbyterian Hospital, Philadelphia; Vancouver General Hospital; Jeffery Hale Hospital, Quebec; St. Louis Hospital, New Orleans.

Schools, etc. — Macdonald College, P.Q.; Y.W.C.A., Montreal; Mary Wheeler School, Providence, R.I.; Garland School of Cookery, Boston; Edgehill, Windsor, N.S.; Montreal Protestant Schools; Vancouver Protestant Schools.

Commercial Field—Sun Life Assurance Co., Montreal; T. Eaton Co., Hamilton; Childs Restaurant, Montreal; Students' Union, Kingston, Ontario.

Other fields that are open to Household Science Graduates are hotel work, institute work in connection with magazines, etc., demonstrating, and research work in foods and bio-chemistry. Besides these, it may be well to mention that 33% of the graduates are finding their course a distinct advantage in the management of their own homes.

It can be readily understood that, with the majority of the graduates holding positions so far apart, the work of the members of the society will have to be carried on under considerable difficulty. In spite of this, it is their aim to keep in touch with one another, and with the undergraduates, with the hope of furthering, whenever possible, the interests of Household Science. Related to this is the hope that in the very near future it will be possible to take, at McGill University, more highly specialized courses, leading to higher degrees. For, in the field of Household Science, as in all others, there can be no better motto than "Mastery for Service."

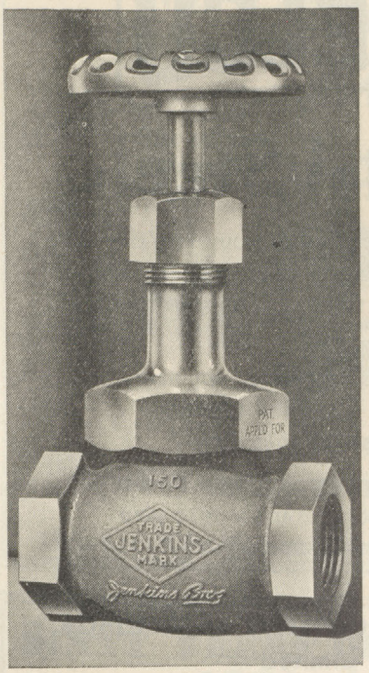
The Empire State Building, New York

(*Continued from Page 23*)

The problems involved in Zoning were greatly simplified, and a wonderful architectural opportunity created by the decision of the Directors of Empire State, Incorporated, to build only five stories over the entire area, in addition to basement and sub-basement, and above the fifth floor to build only office space, which, in New York City, means space not more than twenty-eight feet back from light.

If a building is to be a financial success, there must be on each floor sufficient usable space when rented at the prevailing rate to produce a net revenue on the investment. The usable area is the space left after deducting the area of walls, partitions, corridors, and utilities. Utilities comprise elevators and elevator lobbies, stairs, toilets, porters' and cleaners' closets, meter and telephone closets, and space for the housing of ventilating ducts, plumbing and heating pipes, and conduits. The spaces occupied by these utilities are greatest on the lower floors and decrease toward the top, and may graphically be represented by a pyramid. Any increase in height is reflected in an increase in the base of the pyramid. In "solving" for height, it is therefore necessary to calculate the area of the pyramid at each floor level, add the areas of enclosing walls and partitions, deducting the sum from the gross building areas, and so determine the amount of usable space. This is then checked against the

FIGURE 106-A . . . with the one-piece screw-over bonnet and slip-on stay-on disc holder



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total building cube, which will establish whether the ratio of usable space to cube falls within economical limits.

These studies are mathematical rather than architectural, and, since in a tall building elevators form the major part of the utilities, the economic height is to a great extent determined by the elevators.

After many such calculations were made, and the results plotted in the form of plan studies, eighty stories was found to be the economic limit for this particular property. Run-bys required for the elevators and space necessary for fan rooms, tanks, and other equipment, added five more stories, and the Observation Floor, which also forms the base of the Mooring Mast surmounting the building, added a sixth floor, making a total of eighty-six floors, exclusive of the mast. These six floors are served by elevators running from the eightieth to the eighty-sixth floors. The Mooring Mast, which rises two hundred feet above the eighty-sixth floor, is served by a separate elevator which, starting at the eighty-sixth floor, rises to the equivalent of the one hundred and first floor, 1,048 feet above the street level. Space will not permit a detailed discussion of the elevators, of which there are a total of 67. Sixty of these receive passengers at the first floor, rise to varying heights, and are designed to operate at speeds of 700, 800, and 1,000 feet per minute, depending on the travel. Two passenger elevators, as previously stated, operate between the 80th and 86th Floors, and one between the 86th and 101st Floor, which is the Observation Room at the top of the Mooring Mast. The remaining four cars are for freight service.

All of the passenger elevators, except those operating above the 86th Floor, are of the full automatic signal-controlled type, with power-operated doors on the cabs as well as at the hoistway floor openings.

A special dispatching system has been designed and installed, so that the starters stationed on the First Floor may control the scheduling of the cars in each group. A telephone has been provided in each cab, so that when necessary, there can be direct communication between starters and operators.

Decisions affecting elevators rendered the early selection of the elevator manufacturer imperative. The Otis Elevator Company was awarded the contract, their selection being followed by frequent conferences with the groups in authority.

The construction program set up had never before been attempted. The elevator installation

called for greater car sizes, heavier loads, higher speeds, and longer travel than any previously known—all of which had to be designed, manufactured, and installed in less time than had heretofore been required for ordinary installations.

Similar problems were involved in the design of the structural steel, as well as in heating and ventilating, plumbing and electrical work, and the speed with which these facilities could be designed, fabricated, and installed was determined by the rate at which the Architects could design, plan, and co-ordinate all of the elements making up the finished structure. No experimenting was possible. Decisions had to be made, and once made had to be carried out, for there was no time for reconsideration.

Many new methods of construction were evolved in order to expedite the work. For the first time, temporary elevators were installed to transport the workmen to the various levels. Tracks for a small industrial railway were laid on each floor, with turntables and connecting hoists, so that materials could be unloaded from delivery trucks directly into small cars, which were hoisted bodily to the different floors, and the material then unloaded at its allotted place.

The most outstanding architectural feature of the Building is undoubtedly the window-spandrel-wall detail. This treatment, which is a radical departure in the exterior design of tall buildings, has not only evoked as much comment as the extreme height, but also contributed in no small measure to the speed with which the building has been erected.

Mr. Lamb, who is responsible for the Architectural design of the Empire State Building, conceived the idea of uniting the windows and the spandrel walls (which are the wall sections between the head of a window and the sill of the window above) by facing the spandrel walls with metal, and framing the unit so formed with a contrasting metal. This unit, which was placed outside the general wall face, not only accentuated the verticality of the design, but also eliminated the traditional window reveals with their resulting shadows, reduced the cutting and setting cost of the limestone wall facing, and permitted the erection of the window-spandrel-wall group to proceed in advance and independently of the adjoining masonry.

A further notable result of this design appears in the interior, through the gain in usable space, accomplished by placing all radiators within the thickness of the exterior wall, without exceeding the minimum wall thickness permitted by the



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Building Code. Radiators, for the first time in the history of a purely business structure, have disappeared. The base continues under the windows on the normal wall face, and the perforations in the base below the radiators and in the window stools at the sill line are the only remaining indications of the heretofore unsightly radiators.

Another feature, which sets the Empire State Building apart from all others, is the Mooring Mast, which extends two hundred feet in height above the main structure. This mast has been designed in anticipation of the time when dirigibles have become an accepted and regular means of transportation. The structural frame of this mast is entirely enclosed with cast and rolled aluminum plates, with chrome steel trim framing horizontal and vertical bands of glass. Hundreds of electric lights set in reflectors back of the glass, with the searchlights placed beneath the crown of the mast, will form a beacon visible for miles both from land and sea. Visitors to New York City will likewise be able to view the surrounding land and sea from observation rooms and galleries at an elevation of 1,224 feet above the street and, moreover, will be transported to this level in fast, smoothly-running elevators. From the street one may be able to discern the topmost feature, a wind-recording device, whose tip pierces the sky 1,260 feet above Fifth Avenue, and which registers both the direction and velocity of the wind on an amazingly beautiful dial in the main entrance hall on the First or Street Floor.

Your Editor has suggested that my part in the creation of this building would be of interest to readers of *The McGill News*. The Empire State Building was designed by the office of Shreve, Lamb & Harmon, each member of the organization, from the principals down to the office boys, functioning in their particular sphere. My early training in building construction, starting long before my entry into McGill, developed a liking for materials and methods of construction. The problems in the design of the Empire State Building presented unusual opportunities for research. I wish that space would permit me to tell the story of the search which led to the use of chrome steel and aluminum, the testing of the action, when exposed to atmospheric conditions, of dissimilar adjacent materials; the problems involved in the location of a material which, under varying temperatures, would effectually caulk the joints between these materials; the provisions necessary to guard against cracking of the stone facing, due to compression in the structural steel;

the solution of these, and a thousand other problems, and the final recording of them in specifications and detail drawings, would tell a story as full of romance as any voyage of discovery ever undertaken.

Perhaps a few notes as to quantities and unusual sizes may be of more interest.

As previously stated, over 58,000 tons of structural steel were used in the structure. Some of the main columns supporting the tower placed on individual footings a load of over 10,000,000 pounds. The largest columns in their lowest sections weigh 2,300 pounds per foot of length, and a cross-section through all of the columns at the sub-basement level totals 278 square feet of steel. The total wind pressure on the north or south faces of the building was calculated to amount to 4,340,000 pounds, of which 318,000 pounds represents the pressure on the Mooring Mast. The completed building has been estimated to weigh 303,000 tons. These figures may convey little to the average reader, and perhaps other ways of expressing these quantities may give a clearer idea.

Had it been necessary to move all of the steel from the shops to the site at one time, it would have required a train of heavily loaded cars 11 miles long. A train, sufficient to transport all of the materials used in the building, would have been 57 miles long. The structural steel, if rolled into rails, would have been sufficient to lay a double track from New York to Washington.

There are 6,400 windows and 7,000 radiators.

The heating system is divided into four separate zones, with distributing mains on the ceilings of the sub-basement, 29th Floor and 54th Floor. The steam supply riser up to the 29th Floor is 24 inches in diameter. There is no boiler plant within the building, the steam being drawn from the New York Steam Company's street mains.

I have previously stated that the construction program set up in November, 1929, which called for completion before May 1st, 1931, had never before been attempted. Let me add, in closing, that through the close co-operation between the Owners, Architects, and Contractors, the building was substantially completed practically two months ahead of the schedule, and was ready for occupancy on March 1st, 1931, less than eleven months from the actual setting of the first structural steel.

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Correspondence addressed by the Graduates' Society to the following members has been returned as the member was not to be found at the address shown on the Society's books. Will anyone with knowledge of the present address of any of the members listed please send the information to the Executive Secretary, Graduates' Society, McGill University, Montreal.

1867—William McCarthy, M.D. '67.

1899—Margaret Parks, B.A. '99.
Mrs. J. D. Trees, Arts '99-01.

1901—Stanley Miller, M.D. '01.

1906—Andrew W. Hendry, B.A. '06.

1910—Charles B. Magrath, B.Sc. '10.

1911—E. P. Stevenson, B.Sc. '11.

1911-13—C. F. O'Shaugnessy, Med. '11-'13.

1912—Rev. Herbert L. Johnson, B.A. '12.

1918—Dr. Eric Drew Ingall Brown, M.D. '18.

1919—Dr. J. A. Street, M.D. '19.

1921—G. Paul Gillies Gauthier, B.Sc. '21.
C. L. Palmer, B.Sc. '21.
Leslie S. Weldon, B.Sc. '21.

1922—Dr. Ivan E. Brouse, M.D. '22.
Hugh M. Jardine, M.D. '22.
Henry H. Kavanagh, B.C.L. '22.
Frederick O. Peterson, B.A. '22.

1923—Gordon L. Laidlaw, B.Com. '23.
Rev. Andrew T. McIntyre, B.A. '23.
Edward J. Murphy, B.Sc. '23.
Howard Edward Reid, B.Sc. '23.

1924—Hubert John Kearns, M.D. '24.

1925—Robert H. Duval, B.Sc. (Arts) '25.
Henry Benedict Hachey, M.Sc. '25.
Frank Millington, B.Com. '25.
Margaret P. Roberts, B.A. '25.
Gordon R. Stephen, B.Sc. '25.

1926—Dr. Wm. K. Burwell, M.D. '26.
Kenneth R. A. Eldridge, B.Sc. (Arts) '26.
Wm. Harper Finnie, B.Sc. (Med.) '26.
Alexander R. Glass, M.D. '26.
L. C. Reid, B.Sc. '26.
Robert N. Stewart, B.A. '26.
William V. G. Wilson, B.Sc. '26.

1927—W. J. V. Moonan, M.D. '27.

1928—James Maitland Cole, B.Sc. '28.
Edward Allan Larkin, B.A. '28.
Wm. B. H. Marshall, B.Sc. '28.
John D. Smith, B.Sc. '28.
Lawrence G. Woolley, B.A. '28.

1929—Kenneth Gordon Chisolm, B.Sc. '29.
Raphael de Boyrie, M.D. '29.
John H. Legg, B.Sc. '29.
Philip Sheps, B.Sc. '29.
R. Douglas Smith, B.A. '29.
Peter S. Wise, B.Com. '29.

1930—Harry M. Byers, B.Com. '30.

Science '12

On the evening of February 5th, a number of members of the class of Science '12 gathered together at an informal dinner at the Graduates' Club, Montreal, for the purpose of appointing a class executive.

The following members were present:—W. M. Bolan, M. A. Downes, E. Gohier, T. G. Goode, G. R. Hutchins, G. A. Johnson, J. A. Kearns, E. Lefebvre, W. T. May, J. W. McCammon, A. B. McEwen, C. K. McLeod, J. J. McNiven, J. P. McRae, J. H. Norris, A. R. Renaud, E. A. Ryan, A. E. Sargent, J. T. Steeves, V. I. Traversy J. H. Wheatley, F. R. Whittall.

In the renewal of acquaintances and in the exchange of reminiscences this meeting proved to be a most enjoyable occasion, and a forward step toward the re-establishment of those contacts which were always a feature of Science '12.

An executive committee consisting of Messrs. Kearns, McLeod, Sargent, Whittall and McNiven was appointed, and charged with the duty of getting in touch with all members of the class. Mr. J. J. McNiven, 37 Curzon Street, Montreal West, was appointed Honorary Secretary-Treasurer.

Science '97

Verses written by J. M. Turnbull for reunion of class of Science 1897, held at University Club, Montreal, January 30, 1931, and read by D. E. Blair.

Hail to our classmates of old ninety-seven
Gathered once more with an eager good will,
We greet the old comrades of thirty-four years ago—
Classmates and comrades at dear old McGill.

Brought to a close in one last consecration
By old Alma Mater, our courses were sealed,
And the ties that had held us together were loosened
And each went his way in his own destined field.

So to our work we turned, slowly the days went by,
Far stretched the future, though brief seemed the past,
Knowledge and confidence grew with achievement
And dreams were transformed into substance at last.

Toast we those present, and toast we those absent,
For some cannot answer the roll call, alas;
But those who seem absent are present in spirit
And join us in drinking a toast to our Class.

And we, though the parts we have played may be humble,
Have worked in the structure and lived in its light;
And still the long years lie before us to labour,
Building the best that we know ere the night.

Athletics

In February the University of Toronto won the Intercollegiate Boxing, Wrestling, and Fencing championships, and McGill added to her list of championships for 1930-'31 the Canadian Intercollegiate Hockey title and the title for Intercollegiate basketball, the former being won through a 6-4 victory in home and home games with the University of Toronto, and the latter by a sweeping series of double victories over Queen's, Toronto, and the University of Western Ontario. The McGill basketball team, for the first time in many years, also defeated the University of Vermont, but the hockey team was not so fortunate in international competition, losing twice to Harvard, the first time in Fort Erie on New Year's night, by a score of 3-2, and the second time at the Forum in Montreal, on February 23rd, by a score of 2-0.

Space forbids the account of these games that we would wish to offer, but a few lines must be found to pay tribute to Harvard. With two victories over 'Varsity, one over Queen's, two over McGill, and a long string over the best college teams in the United States, Harvard stood out in the season, though a 5-1 defeat by Yale may prevent recognition of any claim to a North American intercollegiate championship.

It was no easy task to defeat the fast, courageous McGill team, which, when these lines are written, is still forging its way towards the championship of the Province of Quebec and a place in the Allan Cup play-downs. But Harvard accomplished the feat, and the *News* takes this opportunity to offer warm congratulations. It would not be amiss to congratulate the McGill team, too, for their fine play throughout the year, nor those other McGill teams—the Swimming and Gymnasium Clubs—which, just before this issue of the *News* was sent to the printers, completed their schedules and brought to a total of nine, the intercollegiate championships won by McGill in the 1930-31 athletic season. This total, we believe, is in itself a record in intercollegiate competition.

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McGILL NEWS

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1878

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1930

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ANTWERP INTERNATIONAL EXHIBITION
1930

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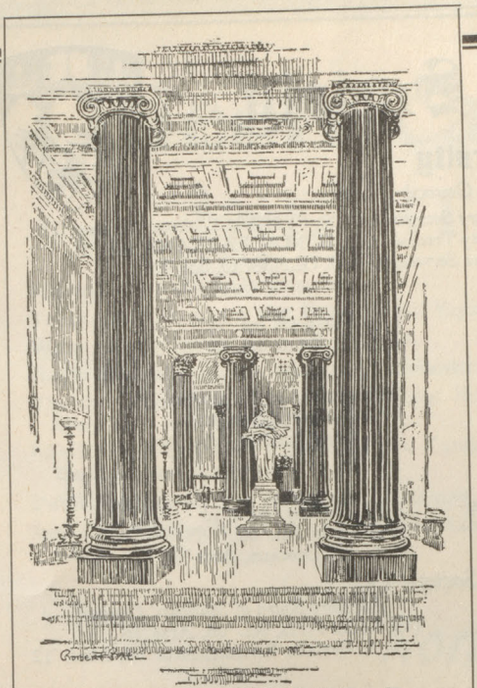
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THE GOVERNOR-GENERAL AS AN LL.D.

From left to right this photograph shows Dr. John Finley, Editor-in-Chief of the New York *Times*, Sir Arthur Currie, His Excellency the Earl of Bessborough, and his aides-de-camp. As His Majesty's representative in Canada, the Governor-General is ex-officio the Visitor of McGill University.

An Address

(Delivered at the Annual Convocation of the University, on Friday, May 29, 1931)

By His Excellency, The Right Honourable
The Earl of Bessborough

MR. Vice-Chancellor, Ladies and Gentlemen: When the members of a great Corporation such as yours unite in offering a high distinction to an individual, it is never easy for him to express his appreciation in adequate and convincing terms. His task is all the more difficult when the conferring of that distinction is accompanied by a personal demonstration of friendly welcome, such as you have accorded me today. I am conscious, too, that with these robes, the outward and visible sign of the Degree conferred on me in my capacity as your Visitor, I am assuming the mantle of an exceptionally distinguished line of predecessors. I count it a signal honour that my name should be added to the list of those who have held that position in the past.

I am particularly glad that I have had this opportunity, so soon after my arrival in Canada, of meeting the members of the University. This is only appropriate; for it so happens that the very first public message I had occasion to send, after His Majesty the King had appointed me his representative in Canada, was in reply to a cable emanating from McGill. It was not merely

a congratulatory cable, of which I had already received many from kind friends on this side of the Atlantic; it called for definite literary effort on my part, since it requested me, as the prospective Visitor of this University, to make a contribution to the Annual Review produced by its undergraduates. I do not claim that my reply was of epoch-marking importance; its text, indeed, is probably lost to everybody except the Editor, the sub-Editor, and myself. Yet the incident, slight in itself, had some significance for me then, and has still more today. It illustrates admirably, of course, the well-known aptitude of McGill students for getting in first on anything new; but, from my own point of view, it had a more serious side. It brought home to me vividly the very varied nature of the responsibilities attached to the office I was about to assume. During the few days that had elapsed since my appointment, my thoughts had run chiefly, as you may imagine, on the constitutional side of the duties of a Governor-General. Frankly, it had not occurred to me, till I read that cable, that those duties comprised, among many other things, an official connection with a great University.

Today, that connection has been cemented by the action of Convocation in making me a Doctor of Laws. Three months ago, my only connection with University life was my happy recollection of Cambridge in my own undergraduate days: my only claim to legal distinction, the fact that I went through the form of being called to the English Bar twenty-five years ago. Those of you who are engaged in the study of philosophy may find food for reflection in this example of the strange mutability of human affairs.

The Degree that has just been conferred on me is an "Honorary" Degree; the same adjective is applicable, no doubt, to my position as your Visitor. But I would not have you think for a moment that I consider either of these two honours a formal, still less, an empty one. To me, they are not merely nominal distinctions; they are more than the ordinary titular trophies of modern public life; they are, on the contrary, links of a positive, even an educative, value to me.

I think you would agree with me, Mr. Vice-Chancellor,—you, who have had distinguished experience of so many sides of human activity—you would agree that a man's usefulness to his fellows is commensurate with his power of indefinitely prolonging his own education. If Genius is an infinite capacity for taking pains, Efficiency might equally be called an infinite capacity for taking mental nourishment. Corps-Commanders and Vice-Chancellors: Doctors of Law, or Governors-General—we must never stop educating ourselves, or we tend to become what St. Paul, that great epigrammatist, called mere "cumberers of the ground."



Photo by courtesy of the *Montreal Star*

UNVEILING THE GOOD-WILL FOUNTAIN

A feature of the Convocation Day ceremonies this year was the acceptance by the Governor-General, on behalf of McGill, of a fountain, presented as a token of good-will by friends of the University in the United States. The photograph shows from left to right: Mrs. Henry, His Excellency the Governor-General, Sir Arthur Currie, Dr. John Finley, who made the speech of presentation, and Lady Currie. Mrs. Henry is the daughter of Mrs. Harry Payne Whitney, sculptress of the fountain, who was unable to attend the ceremony.

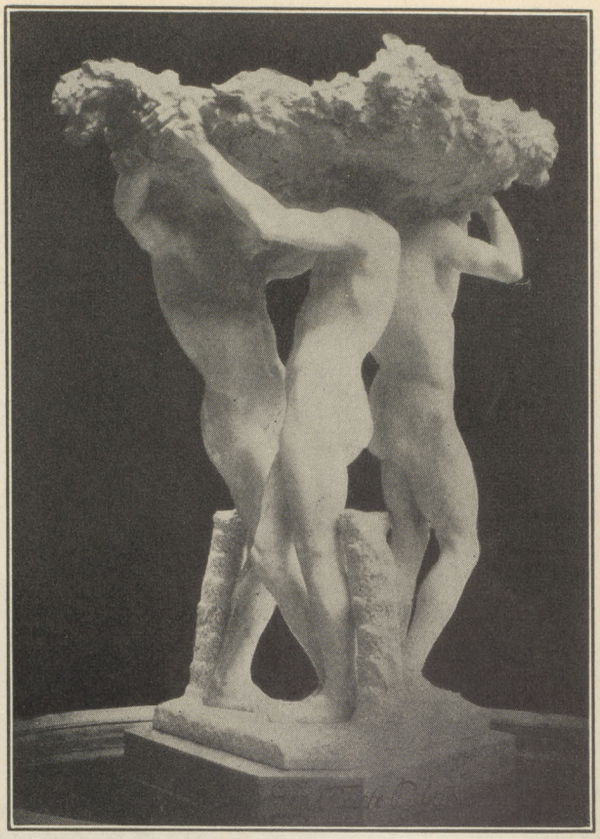
That word "education" has been more laboriously defined, perhaps, than any other in the English language; but I came across a new, and very simple, definition of it the other day which gives, better than most, the sense in which I am using it. "Education"—I am quoting Professor J. S. B. Haldane—"Education is a process which puts people in touch with the thought of the abler minds of their own, and past, times." It is because I have been put very closely in touch with the thought of McGill that I look on my association with it as a real step in my own education.

But, to make my meaning clear, I must amend my definition; I must expand it to include, not only time past and time present, but even time future. As I see it, one of the most important duties of the Governor-General of Canada—maybe the most important of all—is to make himself conversant, as quickly as possible, with all phases of Canadian thought. He must know something of the attitude of mind of Canadians of all professions, and of all ages. To do this with his contemporaries is, comparatively speaking, easy; what is more difficult, but what, if he is a wise man, he will never neglect, is to study the mental outlook of the *coming* generation.

I can think of no way in which that end can be better attained than by establishing a close connection with your great Universities; by trying to find out not merely what its Seniors are *thinking* about the past, but also what the Juniors intend to *do* about the future.

This is the age of Youth; that is not merely a well-worn rhetorical generalisation—it is also a hard fact that can be supported by statistics, compiled, as they say in the world of Insurance, on an actuarial basis. One of the most remarkable changes in my own life-time—and my generation has seen a good many changes—is the marked decrease in the average age of those holding positions of trust, in every walk of life. In the Services, in the Law, in politics, science and industry, young men and young women can now be found in posts of responsibility that, thirty years ago, were held exclusively by greybeards. That is why, all you Ladies and Gentlemen who have yet to graduate, and who will do so, I hope, with immense success,—that is why I want to address myself more particularly to you.

Here, in this world-famous University, you have the opportunity of turning that change to your own advantage; here—to take a metaphor appropriate to this country above all others—here, the water-power of the Old World's secularian stream of knowledge is harnessed, for your benefit, by the genius of the New; the current thus generated is at your disposal, to drive those two engines that every one of us has within him—the engine of Brains and, even more important, the engine of Character.



THE GOOD-WILL FOUNTAIN

Executed in marble and presented to McGill on May 29, 1931, the fountain now stands in the hollow to the west of the main avenue of the University grounds, as a permanent token from friends in the United States.

Such an opportunity is the right of Youth; but it is an axiom of political science that to every Right there is always a correlative Duty. I do not need to tell you what that Duty is; to emphasise that you too have a certain debt to pay to your country in general, and to McGill in particular, in return for what McGill has done for you.

Your fathers have given you a finer heritage than was ever bequeathed by any individual Emperor to his son; they have laboured to build up for you, in the face of immense difficulties, a country that excites the admiration of the world, whose future is so rich in possibilities that it taxes the world's imagination to estimate them. But, if the Canada of today is the handiwork of your fathers, the Canada of tomorrow must be yours. It will be work of a very different nature from theirs, no doubt. Where they wrestled with the forces of Nature, you will be face to face

with forces less obvious, but no less formidable; your problems will not be those of time, and space, and climate, but problems of citizenship: of social adjustment to rapidly changing social conditions: of the sane application of scientific discoveries to daily life: of the political evolution of all this wide and restless world. If you are to solve them, if you are to hold your heritage, and not to squander it as so many splendid heritages have been squandered in the past, you will need a full equipment of brains, of character—and of faith. From what I know already of McGill, and in anticipation of what I mean to learn of it in the next five years, I am confident that you can find that equipment within its walls. If, at the end of those five years, when I surrender my office of Visitor to my successor,—if I can then assure myself that another generation, thus equipped, has gone out into the world through the gates of this University, it will mean even more to me, believe me, than do these honours that have been offered to me today, and the unmistakable friendliness of the welcome that has attended them.

A McGill Year in Sport

SWEEPING to a total of championships unequalled in the whole record of Canadian intercollegiate sport, McGill athletes brought the 1930-'31 season to a close a few days after the last issue of the *News* was prepared for publication.

Once in the past 'Varsity gained eight championships in a single season and once eight had been captured by McGill, but in the 1930-'31 season McGill surpassed these records of former days, winning ten out of the fifteen championships contested and setting a mark that in all probability will stand unbeaten for years to come.

Starting in the autumn, teams bearing the red and white drove their way to championships in English Rugby, Track and Field sports, Soccer, Tennis, and Golf; and later in the season the Basketball, Hockey, Gymnasium, Swimming, and Water Polo teams were equally successful. In addition, the Hockey Team battled its way to the championship of the Provincial Senior Group in Montreal; defeated the strong St. François-Xavier team for the championship of the Province of Quebec in a gruelling series of over-time games; and, though weary beyond description, defeated Truro Bearcats, champions of the Maritime Provinces, in the first, but not in the second, of a two-game series of the Allan Cup play-downs.

To celebrate all these events in a suitable manner, members of the championship teams, members of the faculties, and a host of friends gathered to dine in the McGill Union on the night of Saturday, April 11th. Sir Arthur Currie, absent in India, was represented by Dr. C. F. Martin, Dean of the Faculty of Medicine, who proposed the toast to the ten championship teams. F. Munroe Bourne, captain of the Swimming Team, replied. George McTeer, captain of the Hockey team, replied in similar terms when Dr. Fred Tees toasted the winners of first-class colours; and coaches M. Van Wagner and Dr. Robert B. Bell acknowledged the toast to the coaches proposed by J. C. Kemp.

A feature of the evening was the toast to McGill, proposed by Lieut.-Col. Robert Starke, a Governor of the University, commander of McGill's war-time C.O.T.C., and an athlete in his earlier days of great distinction. To his warm congratulations, Dean Ira MacKay, of the Faculty of Arts and Science, replied, the programme then continuing with entertainment provided by members of the Red and White Revue.

To the congratulations extended to the ten championship teams on this occasion, the *News* repeats the congratulations and good wishes it has offered before. Some McGill men will learn for the first time of the record the ten teams established when these pages reach the far-away corners where graduates are at work. We believe, however, that we express the feelings of such graduates, as well as our own, when we state that our gratification in McGill's ten championships is profound and our congratulations to those who won them hearty and sincere.



A VISION OF THE FUTURE

Upon this aerial photograph of Montreal, showing to the left the new University Tower, Bell Telephone, and Royal Bank buildings, an architect's conception of the $50,000,000 Canadian National Terminal has been super-imposed. The straight line to the Montreal end of the Victoria Jubilee Bridge is clearly indicated.

The Canadian National Terminal in Montreal

By Sir Henry W. Thornton

STEAM and gasoline shovels are puffing, pile drivers are busy, bridges have been constructed across the Canadian National tracks entering the Bonaventure station area, subways have been constructed and are in operation, and various other works in progress in the heart of Montreal proclaim that the work of constructing the new terminal facilities for the Canadian National Railways is well in hand.

It is a big project, this five-year task of giving to the Canadian National System in Montreal terminal facilities adequate for the needs of a growing metropolis. Plans had been studied for years before they were brought before Parliament, where they were approved and $50,000,000 voted for the terminal construction. Various methods of entering the city and traversing the densely populated areas were carefully considered and a plan of elevated entrance, as against subways, was chosen from an engineering viewpoint. The completion of the terminals will remove many dangerous grade crossings; will provide for electrification of all passenger train movements in the city limits, and will provide freight, express and passenger terminals in keeping with the needs of both local and long distance traffic.



SIR HENRY W. THORNTON

The Chairman and President of the Canadian National Railways is here shown studying a model of the Terminal facilities he describes in the present article.

It will also finally co-ordinate Canadian National facilities on the Island of Montreal, in which area dwell almost one-tenth of the entire population of Canada, and, in addition to providing adequate freight handling facilities, will bring all Canadian National lines into one terminal in the heart of Montreal.

The project is immense, requiring the excavation of millions of cubic yards of earth from the central passenger terminal site, where now a number of power shovels are at work. In preparation for this, whole blocks of buildings were razed, for the viaduct entrance to this station area cuts a wide swath through the lower business section of the city. Trains entering the city from north and west will reach the station through a tunnel beneath Mount Royal, while those from United States points and east of Montreal will enter the city by way of Victoria Bridge, and from the city end of that bridge will traverse Montreal by means of the main viaduct now under construction.

The plans also include a belt line encircling the city, which will provide the railway service required for the development of industries and for the convenience of residents in the north and east end of Montreal.

Besides the central passenger station, which will stand near the present tunnel terminal, there will eventually arise, it is anticipated, office buildings and other structures, erected on the "aerial rights" over the depressed station trackage, for the plans include making this space over the tracks available for building, as has been done in other large termini.

For all practical purposes, the three existing passenger stations of the Canadian National in Montreal are entirely disconnected; the same conditions apply largely to the freight facilities.

Extensive freight facilities now existing in the east and west sections of Montreal are so widely separated that transfers may be affected only by using the already overcrowded tracks of the Harbour Commissioners along the south waterfront of the city, or by a haul over the company's own lines from Longue Point, about two miles east of the Moreau Street passenger station, to the Turcot yards, west of Montreal, via Joliette, Rinfret, and Eastern Junction to the north, a distance of 108 miles. The present comprehensive plan of unification will remedy these adverse operating conditions and will provide for considerable expansion to meet future requirements.

The site of the new terminal is immediately at the south end of the double-track tunnel under Mount Royal, and almost in a direct line between the tunnel and Victoria Bridge, over which all Canadian National trains enter the city from the south. The general topography of the area forming the new station site is well adapted for the purpose. In the first place, the tracks at the south end of the tunnel are from 30 to 50 feet below the general level of the surrounding property, which will permit extensive overhead developments. Still more significant, the elevation of the tracks at the tunnel site is almost exactly the same as that of the tracks at the north end of Victoria Bridge, and a level line between these points lies from 18 to 28 feet above the intervening streets.

The tracks will run in a generally north and south direction, from Victoria Bridge, crossing St. Antoine Street overhead, and will extend on a level grade through the station site to Mount Royal tunnel. All train operations into the station will be electrified.

All the tracks at the station will be under ground and will be served by car floor level intermediate platforms. All baggage, mail, and express facilities will be located beneath the track level, with elevator and ramp connections to the track platforms. A vehicle approach to these facilities will be provided at street grade from St. Antoine street.

The passenger facilities will be located above

the track level and will be connected with the track platforms by means of stairs and ramps. The main train concourse is planned at right angles to the tracks, directly under Dorchester street, and along its south side will be located a spacious waiting room with all of the auxiliary facilities necessary to a modern, well-equipped station. New tramways tracks will be provided, running through the station site, over the railway tracks, and existing streets surrounding the station area will be widened and improved to preclude traffic congestion.

Special features contemplated in this regard include a double-lane vehicle subway under McGill College Avenue, parallel with the tracks, extending from the north side of the station, north to a point a short distance beyond St. Catherine Street. This subway, and the proposed new streets through the city, will, in addition to providing a convenient access to the station, be of great benefit to the city in improving street traffic conditions, and will further eliminate traffic congestion and delays at both St. Catherine and Dorchester streets.

Another special feature to facilitate the movement of traffic to and from the station will be an underground taxicab stand and garage. Passenger entrances and exits to the station, for those arriving on foot and in private automobiles, will be ample in number and will be conveniently located on the four streets immediately surrounding the station.

Directly above the passenger station, a large office building is planned, to house all the executive and operating offices of the Canadian National in Montreal. All the remaining area directly over and adjoining the terminal area, except that to be occupied by streets, will be available for the construction of hotels, theatres, stores, and offices on long term leases.

Immediately upon the opening of the station, it will accommodate 95 per cent. of the Canadian National passenger trains entering or leaving the city, and shortly thereafter, upon the final completion of all its approaches, will be able to handle the remaining 5 per cent. with allowance for expansion in traffic on all lines.

The approach to the station from the south will be over a viaduct and fill. From the station south to Wellington Street, a distance of seven blocks, there will be a six-track viaduct of reinforced concrete construction, with steel bridge spans over all street crossings. The viaduct and bridges, which will be made architecturally pleasing in character, will have waterproof decks, and the tracks will be carried on stone ballast. All the area beneath the viaduct will be available for storage space, garage, or other use.



BUILDING THE VIADUCT TO VICTORIA BRIDGE

This photograph shows the manner in which the direct route from the new Terminal to Victoria Bridge cuts straight through the heart of Montreal. Since this photograph was taken, the work has made rapid and satisfactory progress.

The new station and its viaduct approach will permit extensive development of the area at the present Bonaventure station for freight purposes. A portion of this area is already a well-established centre of the fruit and vegetable trade, and removal of the passenger facilities will allow the road greatly to expand and improve its services in the handling of perishable produce.

The existing tunnel under Mount Royal will constitute the northerly and westerly approach to the new station, and it is expected that the two tracks of this route will be capable of carrying from three to four times the volume of traffic that will be impressed upon them immediately after the new facilities are put in use. However, in order to take full advantage of this line and to connect it with the facilities in the east and west sections of Montreal, two important cut-off lines are planned.

One of these is to be a single-track line from the present Longue Point, in the Eastern part of the city, which will extend to the north, then swing to the west around the back of Mount Royal to a connection with the tunnel line at Eastern Junction. This line will be about ten miles long; and, immediately upon its completion, east end passenger trains will be able to operate into and out of the new station, via the tunnel. Of greater importance, the new link line will provide a much needed connection between the yards and tracks located in the eastern part of the city and those located around Turcot to the west.

The second of the two new sections of track to be built will be a double-track line joining the tunnel line, which itself serves the Laurentian Mountain district and Ottawa, with the present main lines to Toronto and the northwest. This new line, which will be about six miles in length, will leave the tunnel line about nine miles from the new station and will swing to the west, connecting with the main line near Point Claire. When completed, all passenger trains to and from the west, now entering and leaving Bonaventure station via St. Henry, will operate into the new station via the new line and the tunnel through Mount Royal.

The more important auxiliary improvements in connection with the terminal project include a new coach yard at Point St. Charles, a new joint yard with the Canadian Pacific at Point St. Charles for the handling of freight to and from the harbour, and a new engine-house and coach yard at the tunnel line near Eastern Junction. The new coach yard at Point St. Charles will replace the present inadequate facilities between Turcot and St. Henry, and will be located immediately along the side of the Canadian National's large shop facilities, with close connection to the proposed viaduct line to the new station. The new freight yard, to handle harbour traffic, will lie to the south and west of the new coach yard and will replace the present totally inadequate yard, which has only a single track connection with the harbour tracks. All the plans for these extensional terminal improvements of the Canadian National at Montreal have been prepared and are being carried out under the general direction of C. B. Brown, Chief Engineer of Operation.

Semi-Annual Meeting

AT the semi-annual meeting of the Council of the Graduates' Society, held in the Arts Building on the night of Tuesday, May 12th, the Executive Secretary reported an increase in membership of 243, despite the fact that 105 members had been dropped for non-payment of dues. He also reported that 271 new members would join the Society from the graduating classes of 1931, and that life membership in the Society had increased by 25.

The Honorary Treasurer then presented the half-yearly financial statement, which showed an estimated excess of revenue over expenditure for the year of $1.004.15, despite the fact that $1,000 was voted to continue the work being done by the Graduates' Employment Bureau for the balance of the year.

The Executive Secretary then presented a report, which stated that the *McGill News*, though enlarged and more extensively illustrated, would not present the deficit that has been customary in recent years, but, for the half-year to date, would show a profit of $356. In view of the difficulty of the present times, this result, due to success in maintaining advertising revenue, was considered most gratifying.

Continuing his statement, the Executive Secretary reported on the work of the Branch Societies, on the McGill Graduates' Lectureship, inaugurated this season, and on the work of the Graduates' Employment Bureau. Discussion of these reports followed; also a discussion of plans and arrangements for the Graduates' Reunion to be held this fall. Following these discussions and the completion of the business in hand, the meeting was declared adjourned.

The Old Chemical Laboratory

By Nevil Norton Evans, '86

THOSE who remember the old Arts Building of the University will recollect that it consisted of a central portion, three storeys high and surmounted by a cupola, two one-storey wings running east and west from this central portion, at the west end the Molson Hall, and at the east end the residence of the Principal, Dr. Dawson. On the front of this long building were five entrances, still preserved in the new structure: the main entrance in the middle, an entrance to each of the one-storey connections, and one each to the Molson Hall and the Principal's residence.

If one went through the door to the east of the main entrance, one entered a little square passage, on the left of which there was a class-room. Straight ahead was the chemical laboratory, and to the right, up four steps, were two little rooms, one behind the other. These filled all the space in this one-storey portion of the building.

Entering the laboratory, there was disclosed a room about thirty feet square, with a brick floor, and round three sides a narrow wooden platform three steps up on which, against the wall, ran the work table, with cupboards underneath and shelves above. In this table were spaced out four little wash basins with two taps each, providing working places for eight students, one large kitchen sink, and gas taps at intervals. On the fourth side of the room, in the wall between it and the class-room, was a double chimney with what might have been a great arched fire-place, but here was built in a large sand-bath heated by a small coal fire. This was rarely used. On each side of the chimney was a draught cupboard. Down the middle of the floor was placed a long lead-covered table, with a number of drawers underneath, and on the top a long gas-pipe fitted with a number of outlets and connected by a rubber tube to another gas-pipe hanging from the ceiling. The laboratory was fairly high and had windows on two sides.

Such, in the summer of 1882, was the chemical laboratory provided for students in Arts and Applied Science. During the fall of that year, the lead table mentioned was replaced by two modern laboratory work-tables, provided with the necessary sinks and gas connections, and providing accommodation for twenty-four students.

The first of the two small rooms already mentioned contained the only chemical balance, set up on the top of a mineral cabinet about four feet high (so that all weighings were carried out standing up), a couple of chairs, a kitchen table, and a few pieces of extra apparatus.

The old class-room was of the amphitheatre type, with a gentle rise towards the back, and with curved benches and writing ledges. Both the benches and the ledges were carved all over, and represented the artistic efforts of many classes of students. In this room were held the lectures in Chemistry, Mineralogy, Petrography, Mining, and Metallurgy, delivered by Dr. B. J. Harrington. The lectures in Geology, Botany, and Zoology, given by Dr. Dawson, were also held here, until transferred to the Redpath Museum building on its opening in the summer of 1882, as were also the Mineralogy and Petrography lectures. The blackboard in this lecture-room were merely a piece of the wall-plaster painted black, and it had an uncomfortable habit of developing little holes which much interfered with the artistic endeavours of the lecturers. Round the sides of the room, wherever there was space, were cabinets and cupboards crammed with minerals, ores, mattes, slags and mining and metallurgical models. The floor was only one board of soft-wood thick (not to mention numerous well-developed cracks), and there was no plastering beneath, so that the noise of stoking the furnaces, and other sounds as well as smells connected with a cellar, might be distinctly detected above during the lectures.

Under the chemical laboratory also there was a cellar, and in this was housed the assaying equipment, a muffle and a crucible furnace and a big cast-iron mortar, in which ores for assaying were pounded up by means of a hefty pestle weighing several pounds. The modern student would feel aggrieved were he called upon thus to prepare his own samples, as the student of that time was obliged to do; nowadays he expects the crushing and grinding to be done for him by machinery, under the supervision of a laboratory assistant.

As has already been indicated, there was at that time in charge of all the chemistry, the

mineralogy, petrography, mining, and metallurgy, both lectures and laboratory work, one man, Dr. B. J. Harrington, assisted until 1886 only by a senior student. How this devoted teacher could cope with such a variety of duties has been a mystery to all who have come after him. But he did it; and turned out students, many of whom won outstanding positions, particularly in the field of metallurgy in the United States. And he won for himself their undying devotion—never has any teacher in McGill been more beloved by his students than was "B.J.," as he was affectionately called.

Not only was the space allotted to chemistry severely restricted—so much so, indeed, that when one class was at work in the laboratory, other classes were generally kept out—not only was the presence of an instructor in the laboratory so infrequent that students did much of their work either unassisted, or with the help of some senior student—but the equipment was also painfully inadequate. Students had to purchase for themselves practically all their chemicals and apparatus, even down to burners and retort and filter stands. There was no regular appropriation for supplies, but small sums of money were obtained from time to time by painful process and applied to those wants that were most immediate.

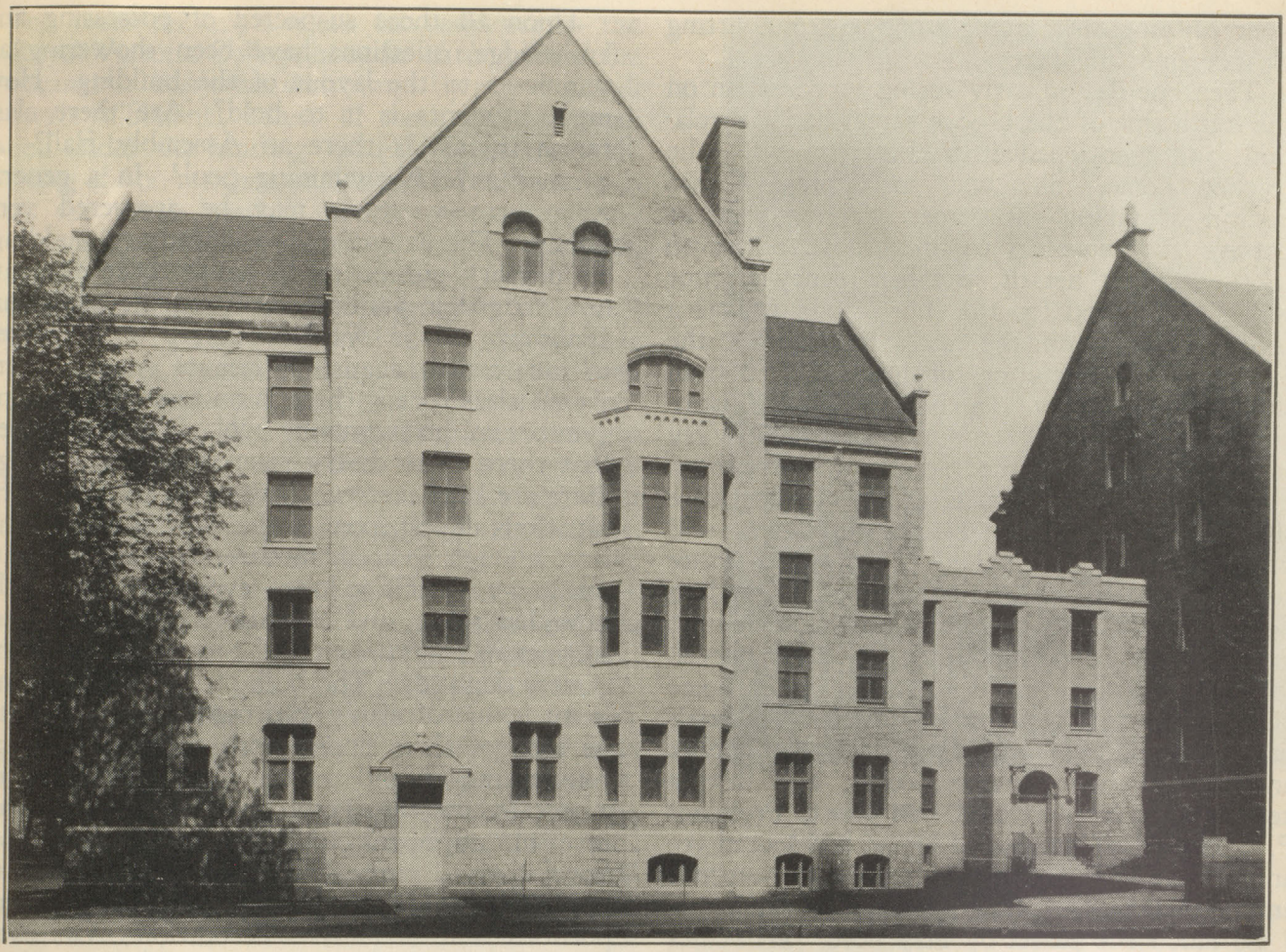
The laboratory possessed three good sized retort stands, and these had to do duty on all occasions. The only large beaker, one of about four litres capacity, had a small hole in the bottom, made by accidentally dropping a stirring rod into it; this hole was covered with a gum label, and the beaker was used for years in experiments in which it was not required to hold liquids. Such were the straits to which the Department was put! Today, when oxygen, hydrogen, or other gases are required for experimental or research work, they are obtained compressed in steel cylinders and supplied to lecturers and students needing them. In those days, the gases were prepared in the laboratory by the instructor or student concerned, and stored in little copper gas-holders, of which the laboratory possessed two.

In the fall of 1884, women were first admitted as undergraduates to the Faculty of Arts; and, to provide accommodation for them—for they were not allowed to attend classes with the men—the one-storey chemistry wing was raised to two storeys, and at the same time, through the generosity of Mr. (later Sir William) Macdonald, extended at the back to provide two more laboratories, accommodating twenty-four students each. These laboratories were not equipped and opened until the fall of 1885. Such richness! In addition to the laboratories, there had been "insinuated" on the ground floor a tiny balance-room, an apparatus room, a little dark room for chemicals, and a wee demonstrator's room; while on the upper floor there had been added a private laboratory for the professor and a combined balance-room and library. This special library consisted of but five books for some years.

There had always been serious doubts in the minds of many as to whether women should be admitted to the University; and, as far as the Chemical Department was then concerned, it proved to be anything but an unmixed blessing. It was the day of the birth of the stylographic pen, a remarkable instrument that delivered ink, when so disposed, in copious and excessive quantities, or did not deliver it at all. The majority of the students were not attracted by this innovation and many of them carried ordinary pens and *so-called* "safety ink bottles." The women students rapidly developed a habit of spilling ink down the fronts of their dresses; and then, the chemical laboratory being so handy, of calling on the unfortunate demonstrator in charge—for after the fall of 1886 there was a demonstrator—to have the ink stains removed instanter. To remove the stain without removing the dye from the fabric often proved impossible; and doubtless to this day, there are elderly females who consider that the exponent of practical chemistry at that date was incompetent in the extreme!

The first demonstrator, having served for three years, went to Germany for two years to continue his studies. On his reappointment at McGill, he wished to carry on some research work which he had started on the other side, but was informed that the college could provide him neither with apparatus nor chemicals. If, however, he cared to take up rock analysis, a subject requiring no special apparatus, and would supply his own equipment and chemicals, he would be allowed to use college water and gas, and might also employ the college balances; but he must do the work after hours, as he was expected to put in the whole day in teaching and demonstrating.

Such was the condition of affairs forty and more years ago. Today, undergraduates and graduate students are supplied with all the chemicals and apparatus they need; the equipment is ample, and the staff numerous. But if in those days instruction and equipment were meagre, there was developed in the students a certain independence that was not without its value.



THE ROYAL VICTORIA COLLEGE EXTENSION

This photograph, presented through the courtesy of A. F. Byers and Company, Limited, General Contractors, was taken on May 19th and shows the handsome extension of the Royal Victoria College as it now appears.

The Royal Victoria College Extension

By Susan E. Vaughan

THIS year of the Reunion is also the year of the opening of the long-talked-of extension of the Royal Victoria College. About a year ago, passers-by noticed that something was happening to the old Learmont house, a landmark on Sherbrooke Street, known to old residents of Montreal long before the Royal Victoria College was thought of. A few weeks passed, the Learmont house was gone, and the place thereof knew it no more, but it knew a scene of immense activity, accompanied by infernal noises, which greatly disturbed the nerves of the French Summer School. The French School came to an end, the deadness of late summer fell upon most of the departments of the University, but the north-east corner of Sherbrooke and University Streets was intensely alive. Reluctant committee members, dragged back from mountain and sea to the hot stickiness of Montreal in September, found an unfamiliar green wall where no wall had been, and a sign announcing to all and sundry that A. F. Byers & Co., builders and contractors, were at work behind it.

All through the winter the work went on; and, as the walls gradually grew into the frosty air, one observed that all the usual comments were being made by the wise outsider who had not been consulted. The proportions of the building were quite wrong. The slant of the façade was outrageous. The lines of the original college should have been much more faithfully reproduced. What was the point of the senseless little tower appearing in the middle of the roof? These and many more observations flew about, and all the while a swarm of workmen continued

their edifying task, laying stone to stone, fitting glass, connecting pipes.

Then one day in early spring a pedestrian on the south side of Sherbrooke Street had a revelation, and mentioned it to his wife when he reached home. She was so impressed that instead of taking the street car next day at Eaton's she came up to Sherbrooke Street to take a look for herself, and had plenty of time while she waited for the 'bus. Soon it was a favourite topic on the walk home from the Symphony Concerts, or turning eastward from the Roddick Gates. A beautiful and distinguished building had come into existence. Very subtly the lines of the old College had been carried along, very cleverly the rather inadequate site and been utilized to its full extent, and instead of an old-fashioned house and a waste corner lot there was now a thoroughly modern dormitory building, grafted upon the somewhat grandiose pile of the familiar R.V.C. and marvellously harmonized with it. There were some charming decorative details: Queen Victoria's hatchment relieved one blank space, her cipher another; symbolic devices, dates, and initials kept the gazer interested. In short, Professor P. E. Nobbs, of Nobbs and Hyde, had scored yet another triumph in his long record of beautiful and original buildings.

So much the passer-by may note. What lies beyond his ken is the much greater achievement of designing a dormitory, modern, economical of space, of maximum residence capacity, which is at the same time an extension of a thirty-year old edifice, designed on lines of superb extravagance. Moreover, the western aspect of the original building had to be safeguarded as far as possible. The problem was far from simple, and it has been handled with great skill. The handsome grey stone building on the corner of University Street repeats in a general way the lines of the older College, with its pointed gables and shallow bays. What is not so apparent is that there are four floors in the new building to the original three, and that on each of the new floors rigid economy of space has resulted in the maximum number of rooms. New and old buildings are connected to the height of the second floor by a handsome corridor. Above that height the wide intervening space insures light and air to both buildings. There are two doors on the Sherbrooke Street front, one opening directly into the Warden's private suite, the other for general use. There is one also at the north end of the University Street side, which will serve as a convenient short cut to the Milton Street gate.

Upon all those suspected of possessing any knowledge, questions have been showering all winter as to the layout of the building. How many students is it to hold? Are there class rooms in it? Is there an Assembly Hall? A gymnasium? A swimming pool? In a general way these questions may be answered very briefly. The extension is a dormitory building. Its primary purpose is to house those students now lodged in annexes, and also the additional applicants whom we have lately been obliged to turn away because of lack of space. There are no class rooms, there is no assembly hall, no gymnasium, no swimming pool. It may be added that there is no dining room, and that, though there are kitchenettes, there is no kitchen. The capacious dining room of the old building is still large enough to accommodate all those students whom we are able to lodge, even with our greatly extended space; and alterations were made last summer in the kitchen and pantries to meet the greater demands. The bulk of the new building is made up of study bedrooms, about twenty on each of three floors, with a central passage running north and south. The rooms are of moderate size, and each is provided with an excellent cupboard. All the rooms are single, but for social purposes each of the three floors is provided with two sitting rooms of good proportions and attractive decoration. On each floor also is a small suite, designed for a resident tutor.

On the ground floor there is an attractive suite for the Warden; and a charming range of rooms made up of an imposing central Common Room, with smaller reception rooms for staff and students respectively, at either end. It is easy to see that these rooms, being en suite, are well adapted for entertainment purposes. Other features of the ground floor are a small infirmary, with nurse's quarters; a room suitable for committee meetings, and a few studies, which will probably be assigned to senior students.

Throughout the building sanitary arrangements are adequate and up to date. In accordance with the present trend of opinion, there are more showers than tubs, and provision for individual laundry work has not been neglected. At the time of writing, no furniture has been installed, but much thought has been given to it, and hopes are high that a local dealer may be right in his prediction that "when everything is assembled these are going to be the finest college rooms on the Continent."

From the foregoing account it will be apparent that the new building has been planned primarily as a residence. As such it fills a long felt want.

For years the applications for residence in the Royal Victoria College have far outnumbered the vacancies. But other wants, equally pressing, still await fulfilment. Many of these may be classified under the heading "Provision for the well-being of non-resident students," but others, such as the much needed modern gymnasium and swimming-pool, are required by all students, resident as well as non-resident.

Before proceeding to enlarge upon what still remains to be done, it should be pointed out that the needs of non-resident students have not been altogether neglected, and that while it has not been possible to allot them much space in the new building, benefits will come their way through the release of certain portions of the old. For instance, on the floor called in England the first, in the United States the second, and in Canada, most confusingly, sometimes the first and sometimes the second, and which in the Royal Victoria College we may designate as the Library Floor, there will be a good deal of alteration and re-adjustment. The enlargement of the Library would have been a matter of present policy even if there had been no new building in prospect. Since the beginning of the Muirhead era, the number of readers has increased steadily, until at the present time it is often difficult to find them sufficient space, not to mention books. Fortunately, the new reception rooms in the Extension will make it possible to utilize the present drawing-room as an additional common room, and as a consequence of this acquisition, to take over the present reading room as an extension of the library. Another proposed feature of the rearrangement of this floor is the conversion of the study bedrooms opposite the library into rest rooms for day students. Further provision for their comfort will be found in the greatly increased locker-room space afforded by the extended basement, and the dressing-rooms on both basement and ground floors.

Without further building it will hardly be possible to do more for the non-resident students, but to anyone who has studied the situation it is clear that what has been done falls far short of their requirements.

The demands made upon the one pathetically inadequate common room in the Arts Building indicates what is needed. A women's union, as near as may be to the Arts Building and adjacent to the Royal Victoria College, is clearly the next objective. The ideal site being secured, the ideal building, or buildings, would combine the necessary study, rest-rooms and cafeteria with the long-coveted gymnasium and swimming-pool.



MRS. WALTER VAUGHAN, M.A.
Acting Warden of the Royal Victoria College

That the above is not an unreasonable aspiration may be concluded by an inspection of the admirably equipped women's unions in such universities as those of Edinburgh and Toronto. In Edinburgh, where the hostels are situated at some distance from the University, the Union was acutely needed and is in constant use. It is plain and simple in its equipment, but exceedingly well fitted for its purpose. Studies designed for special groups of students, as for instance those in Medicine, contain small collections of books much in demand. There are also rooms for social gatherings, a lunch room, dressing rooms, shower baths, etc. In Toronto, both University and Victoria Colleges are provided with Unions, that of Victoria being the very handsome mansion, once a private house, known as "Wymilwood." Its presentation to Victoria College as a women's union was an example of munificence on which other colleges may well cast envious eyes. Something much less pretentious would satisfy the women students of McGill, and a simple building specially designed for their purposes, with a modest endowment, would be the consummation devoutly to be wished.

It is nearly fifty years since women were admitted as students of McGill, more than fifty years since Sir William Dawson made provision for special classes for them. Older graduates

still hold in grateful memory those professors, notably the late Dr. Clarke Murray, who spoke eloquently for their admission. On the material side they have had but one benefactor, Lord Strathcona, the revered founder of the Royal Victoria College. His great example should surely have had followers ere this, and one would look for some generous women to support and continue the work so nobly begun. It may be that the need for its support has never been realized. It should be remembered that the women's college shares in the needs of the University and that these are perpetual. Provision made for fifty students is not enough for five hundred, and it is in about these proportions that the women students of McGill have increased in the last forty years. The Society of Women Graduates has shown a lively interest in the well-being of their successors, and would surely co-operate to the extent of their resources in any advance movement. A golden opportunity awaits that friend of education, man or woman, who would build into the University and community as a lasting monument the third unit in the women's group of University buildings. The most spirited looking martlet in all McGill now crowns the central turret of the R.V.C. Extension. Let us have another a little further to the north!

Copper Mining

By F. W. MACLENNAN

COPPER is probably the most ancient of the metals, its discovery and use coming about in the last stages of the Stone Age.

In spite of its antiquity, the use of copper metal on a large scale is comparatively modern. It is estimated that during the 5,000 to 15,000 years that copper has been known to man, prior to the beginning of the 19th century, only the insignificant total of 1,000,000 tons had been produced and utilized, but during the 130 years since the beginning of the 19th century, approximately 45,000,000 tons of copper have been produced, and of this total three-quarters has been produced during the 30 years of the twentieth century.

It may be difficult in these days of industrial efficiency to picture the surprise with which some ancient savage observed a dark nugget that could be pounded into almost any shape, even into the best implement of war known at that time, but thus arose the first market for the red metal. Accidental roasting of copper, yielding pellets among the cookhouse ashes, was probably the initial smelting of copper, an occurrence dating back into the pages of the past, possibly more than 5,000 years ago.,

The existence of vast slag dumps in the Mount Sinai country of Arabia shows that copper smelting was successfully practised 5,000 years ago, and one story has it that King Solomon obtained his copper vessels from this source.

Copper being a comparatively soft metal was not as suitable for the manufacture of tools and implements of war of ancient man as were some of the alloys, particularly bronze and brass. The discovery of bronze took place about 3,500 B.C. while that of brass did not happen until about 3,000 years later. In other words, brass is less than one-half as old as bronze. This is due to the fact that the alloying of copper and tin, which go to make bronze, is much easier than the alloying of copper and zinc, which constitute brass, due to the fact that zinc has a much greater affinity for oxygen than has tin.

It has long been known that copper is an indestructible metal, so far as the elements of nature are concerned, and this was recently confirmed by the Italian Government when it lowered the level of Lake Nemi and disclosed one of the sunken luxury barges of the Emperor Caligula. Examination revealed the interesting fact that the many copper nails in the boat were in a state of almost perfect preservation.

Eight thousand years ago, the Egyptians hammered native copper into many kinds of implements, also sheets, and so advanced did their craftsmen become that they made copper pipes for the surface water drainage of a temple, built about 2,750 B.C., at Abusir, where 1,300 feet of 1.85-inch piping was used. Most of this copper has been removed, but one length of the original pipe was found and now is exhibited in a museum in Berlin. It is forty inches long and has apparently been hammered over a form, and the sections had been closed by hammering. The

fact that Egyptian workmen manufactured two copper doors for the temple of Karnak, implying the smelting of copper in a species of blast furnace, reveals that the industry was quite well developed.

One result of the last ice age in America was the breaking off of copper nuggets from exposed lodes in the Great Lakes region and the carrying of them south over a vast area. In this way, copper fell into the hands of the Indians, with the result that implements of all kinds came into being. The Indians later discovered the mother deposits in the Great Lakes region and mined a modest distance underground.

The work of the Redmen led to the opening of the Lake Superior mines in 1844 and the evolution of the immense American copper mining industry really dates from this epoch-marking event. From rough and ready methods used in former days, the Lake Superior mines developed and operated on a large scale. The romance of copper had begun; the electrical age had become possible; and a great forward step in civilization had taken place.

That copper bells were used by the Pueblo Indians is amply demonstrated by the finding of such trinkets in burial urns near Globe, Arizona, and it is inferred from the habits of surviving Pueblo Indians that the articles were not used as bells, but as ankle adornments, especially when dancing.

At the time when Lake Superior mines were being opened on a large scale, only 4.5% of the copper consumed in the United States was produced in the country. 95.5% of it was imported, nearly all from Chile. In order to build up the domestic copper industry, it was necessary to protect it from this foreign copper produced by cheap labour in Chile, and this was done through the tariff act of 1846. During the 84 years since this date, the copper industry in the United States has assumed large proportions and at the present time domestic production and consumption of copper metal are about equal.

The opening of the Lake Superior copper mines in 1844 was followed by the opening of the important Montana properties at Butte in the sixties, which was followed by the beginning of copper development in Arizona in the seventies, and this latter development proved to be the most important in the United States.

With the exception of the mines which produce native copper, such as the Lake Superior mines and the Corocoro mines in Bolivia, nearly all copper mines have commenced their careers as precious metal mines, or at least have attracted the attention of prospectors and engineers through the presence in their outcrops of gold and silver. This characteristic is due to the fact that most of the copper occurs in nature in combination with sulphur, or with sulphur and iron, and in this form it is easily oxidized to sulphate by the elements, and as this sulphate is soluble in water, the copper is leached from the outcrop and carried down in solution and redeposited in the ore body at a lower depth, known as the zone of secondary enrichment. If the original copper sulphide ore contained gold and silver, these precious metals, owing to greater resistance to the elements, remained in the leached siliceous outcrop, together with varying quantities of iron oxide, which gives the outcrop a yellowish, or reddish colour which has usually been the first indication to the prospector of the presence of valuable metals. If there has been no gold or silver present in the original copper sulphide ore, this outcrop will be barren



FRANCIS W. MACLENNAN, SCI. '98

Mr. Maclennan is the winner for 1931 of the coveted Saunders Gold Medal of the American Institute of Mining and Metallurgical Engineers. The award was made for methods he devised to extract copper from ore of a grade lower than had ever previously been worked successfully.

of any valuable metal, but, even so, if it shows certain evidence characteristic of leaching out of copper minerals, it has come in late years to be regarded as an indication of copper minerals below, and a great deal of work has been done on these barren outcrops, particularly in connection with the exploration and development of the so-called porphyry copper mines.

Up to the beginning of the present century, practically all copper was produced from ores containing native copper, or sulphide ores of high enough grade to afford the cost of direct smelting. The existence of large deposits of low grade copper-bearing rock was known, but no method had been developed for their profitable mining and treatment, and it remained for D. C. Jackling, an honoured name in the mining profession, to lead the way in the development of the so-called porphyry mines. In the short space of a quarter of a century, the production from this class of mines has grown from nil to approximately 50% of the production of the United States.

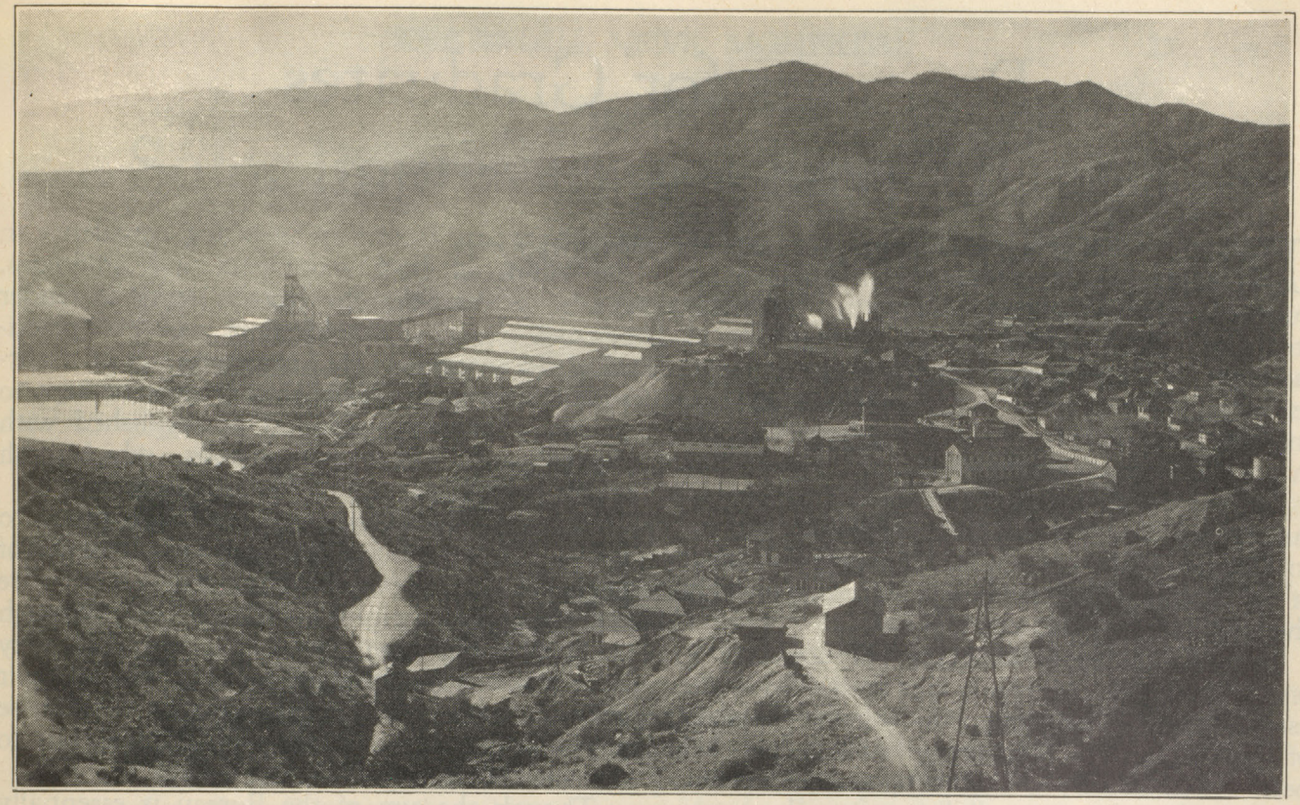
The so-called porphyry ore consists of finely disseminated copper sulphides, in the form of specks or thin seams, through large tonnages of barren rock. The mines of this class take their name from the porphyry which formed the gangue in the earlier mines. Other mines of similar type have since been developed in which the copper is disseminated through other rocks such as schist, diabase, etc.

This class of mine is characterized by the low grade of the ore and the large-scale of operations. In some instances, the grade of ore now worked profitably is as low of 0.7% copper and the scale of operations varies from 5,000 to 60,000 tons daily in individual mines. To make this grade of ore profitable, it is necessary to resort to a greater use of mechanical apparatus and a wider employment of electric energy, and to apply these agencies on a very large scale for the production of mine tonnages hitherto unknown. The outstanding thing which distinguished the exploitation of this type of ore from ores previously mined and treated, was the introduction of water concentration to remove the great tonnage of barren rock before subjecting the copper in concentrated form to the expensive heat process of smelting. In the early practice, this water concentration made the separation of the heavy mineral from the lighter gangue by utilizing the difference in their specific gravities. About eighteen years ago, this process, which was largely a physical one, began to be superseded by a new process, partly chemical, known as the flotation process. This has now almost completely replaced the gravity process, so that at present the complete process for treating the disseminated copper ores from the porphyry copper mines usually consists of the following:

The ore is crushed from run-of-mine size in coarse crushers, followed usually by rolls to reduce it to about one-quarter inch mesh. This coarse crushing, which has been done usually in the dry state, is followed by fine wet grinding in rod mills or ball mills, so that the entire product passes 48-mesh and the bulk of it minus 100-mesh. To this finely ground pulp is added a chemical, which has the faculty of coating the mineral particles, but not the rock particles, and by the introduction of pine oil and air bubbles, produced by mechanical agitation or blowing the air into the pulp, the mineral is floated to the surface, owing to the fact that the chemical filament on the mineral particles attaches these particles to the air bubbles, while the rock particles are not so attached and drop to the bottom. By this process from 80% to 90% of the copper is recovered in the form of copper concentrate, which varies in grade, depending on the richness of the copper mineral itself. The concentrates from an ore running less than 1% copper may be raised to a grade of 40% or more. This concentrate is filtered and smelted in reverberatory furnaces, either after, or without, preliminary roasting, and the copper is collected in a liquid matte consisting of copper, iron, and sulphur. This is then blown in converters, the sulphur being eliminated as a gas in combination with oxygen and the iron slagged off in combination with silica, the valuable product being blister copper, which contains any gold or silver that may have been present in the concentrates. This blister copper is then cast into anodes and electrolytically refined, to produce electrolytic copper, which is cast into commercial shapes and sold as electrolytic copper to the copper fabricators. The gold and silver contained in the blister copper settles to the bottom of the electrolytic tanks as a sludge and is collected and refined.

75% of the copper fabricating plants in the United States are now owned or controlled by copper mining companies.

The advance in the mining and metallurgical technique in connection with these porphyry copper mines has been rapid during the last two decades through improvement in both process and equipment. An interesting example of this is to be found in the operation of the Miami Copper Company. During the year 1930, the average grade of the ore was 0.716% total copper,



PLANT OF THE MIAMI COPPER COMPANY, MIAMI, ARIZONA

The author of the accompanying article is the General Manager of the great industry here illustrated. In the article, he mentions that the rejection dumps of yesterday are profitable ore bodies today, but fails to indicate his own great share in bringing this situation about. Recent honours paid him in the United States and abroad, however, prove that his outstanding work is not to go unrecognized.

or 14.32 pounds per ton, while in the year 1912 the copper lost in the tailings was 0.763%, or 15.26 pounds per ton. In other words, the ore body of today was the discard of eighteen years ago, and it is interesting to contemplate whether the discard of today will become the ore of eighteen years hence.

At a time like the present, when many people view existing conditions with a certain degree of apprehension, it may be interesting and not a little reassuring to look into the figures of past production. Clearness is gained by putting the United States Bureau of Mines figures of world production of copper, in short tons, by quarter centuries, in tabular form, as follows:

1801-1825	464,000
1826-1850	1,038,000
1851-1875	2,358,000
1876-1900	7,612,000
1901-1925	25,726,000

These figures show an average increase of 52.8% per decade for 100 years. Other authorities place the annual increase in the production and consumption of copper at 5.6%.

At the present time, copper is suffering from the world-wide depression which has so adversely affected nearly all other industries. Large stocks of unconsumed copper metal have been accumulated and mining operations have been drastically curtailed in an attempt to reduce these stocks. In the meantime, the price of the metal now at 8.75c is the lowest for more than thirty years, and compares with an average price for the same period of approximately 15c per pound with a maximum price of 31.890c in 1916, occasioned by the large war demand for copper.

This situation, taken in conjunction with the increasing capacity of some existing mines to produce and the considerable amount of new production which will come from the important mines being developed in Northern Rhodesia, causes a rather pessimistic outlook for the copper industry to be felt in some quarters, while others hold the view that we are on the threshold of a new electrical age which will require immense quantities of copper and bring a greater prosperity than ever to this important industry.

Positions for Graduates

By A. Deirdre Donnellan

THE ideal which the Graduates' Society has in mind in the operation of the Employment Bureau is that of *Service*; primarily to the graduates and past students of the University, in assisting them to obtain suitable employment; secondarily, to business and professional firms and educational institutions throughout Canada, in providing at all times candidates for vacancies in their personnel; and thirdly, as a natural outcome of its activities along these lines, service to McGill University, by placing at the disposal of the faculties the information obtained through the contacts the Bureau establishes.

In endeavouring to attain its three-fold object, one of the most important factors has been the establishment of co-operation with the faculties of the University. This co-operation, which has been whole-heartedly extended to the Bureau, has contributed in no small degree to such success as the Bureau has achieved to date, and will become increasingly important as the work of the Bureau develops.

Since the reorganization of the Bureau in January last, there has been a steady increase in the number of graduates who have availed themselves of its services, and, although the depressed economic conditions which still prevail have prevented a proportionate increase in the number of positions offered, this has not been regarded as a cause for discouragement, but rather as an indication of the necessity for such work as the Bureau seeks to accomplish, and an incentive towards increased efficiency in that work.

In the interest of the graduates, every effort is made not only to respond to calls which come to the Bureau, but to create and develop, with organizations throughout Canada, contacts which will lead to opportunities for placement; also to bring such opportunities as they arise to the attention of suitable candidates.

To carry out such a plan effectively, it is essential to have on file complete qualification records of as many graduates as possible from each of the faculties of the University. It is obvious that the Bureau must be in a position to respond promptly to calls for men or women who possess specified training and experience, and the extent to which the Bureau can so respond, and the accuracy of the information which it supplies, are important factors in inspiring confidence in the minds of both employers and graduates. As far as possible, the Bureau seeks to render personal service and endeavours, wherever practicable, to interview graduates seeking its assistance, but it is necessary that records be kept to increase efficiency. This is accomplished with the help of registration blanks, which each applicant is requested to fill out carefully.

There is sometimes a natural reluctance to submit their names and qualifications on the part of those who are at present employed, but who are not engaged in congenial work, or who, although occupying important positions, feel that they have reached the limit of advancement in their organizations, or for other reasons wish to be put in touch with suitable opportunities, but do not wish to make public their desires.

Though the aim of the Bureau is essentially to secure the placement of graduates who are unemployed, it is obvious that as contacts are formed the Bureau should from time to time be asked to secure for business organizations older men capable of occupying positions requiring varying degrees of business or professional experience, in addition to university training. The reputation of McGill University, and the fact that many of its graduates occupy administrative positions in the industrial and professional world, result in such calls reaching us. Within the short time during which the Bureau has been in active operation, we have had no fewer than four calls for men to fill positions with salaries from five to ten thousand dollars, or upwards. It is clearly in the interest of graduates of the University that such positions should be filled from their ranks. As these inquiries are usually of a confidential nature and consequently cannot be made public, it is necessary for us to get in touch with suitable candidates and, with their permission, submit their qualifications. For this reason, we have established a *confidential* list of candidates, who will be advised of openings that may arise in the particular field in which they are interested, but whose names will not be submitted without their permission.

All graduates who are interested in obtaining such information are invited to write in confidence to the Secretary, Graduates' Society Employment Bureau, McGill University, Montreal.

Some Impressions of Soviet Russia

By Dorothy A. Heneker

PROBABLY no country in the world today presents such bewildering contradictions as modern Russia under the Soviet régime. Even to the casual observer, the surface of life reveals many perplexities, whilst to those more deeply interested fresh problems are encountered at every turn, prohibiting all efforts to form impartial judgments, or even to preserve any definite opinions. As one writer has said, "There are no standards, no precedents, no ways to determine just what is impartial in a state of things unlike anything in human history. For when you are in Russia it is as though you had wandered into another world." Apart from all this, there is the added difficulty of language, and the traveller is entirely dependent upon his official guides for translation and all information. Under such circumstances, accuracy of observation is practically impossible, being, perforce, superficial, and the most that can be done is to record general impressions of places and people as they appear under this new régime.

Opportunities to visit revolutionary Russia come seldom—if ever—and, therefore, when I was urged last summer to join a small group of American business and professional women, who proposed including Russia in their tour of northern Europe, other plans were quickly abandoned and I joined this party in Stockholm on their way to Helsingfors, in Finland. We were officially known as "The Northern Section of the Third Goodwill Tour," which was organized under the auspices of the American Federation of Business and Professional Women.

Originally arranged to provide an opportunity for members to study economic conditions abroad, and to meet the business and professional women of different countries, these tours have proved increasingly popular, and have been largely responsible for the formation of a new organization known as the "International Federation of Business and Professional Women," which came into existence last August at a conference held at Geneva. This year, official introductions were secured in Russia, and it was decided to visit this country, entering by way of Finland and travelling from north to south, visiting Leningrad, Moscow, and Kiev, and thence crossing the Polish frontier to Warsaw.

The hospitable Finns were loath to let us go and kept asking, "Why do you want to visit Russia? There is little to eat and nothing to see—change your plans and stay longer with us." Nevertheless, our arrangements being completed, we left for Leningrad (St. Petersburg) by the night express from Helsingfors on the evening of August the First, and reached the Russian frontier early the following morning. Here we were strictly examined by the Red guards, who showed special interest in any books or written documents, and we were also obliged to give an exact account of all the money—or equivalents therefor—in our possession. Our statements were checked, and change and receipts given in return, which receipts were again carefully scrutinized when we passed out of Russia over the Polish frontier.

Northern Russia is like Canada, and as we travelled on our way it was often difficult to realize that we were in a foreign land. This impression was increased

by the fact that, rather to our surprise, we travelled comfortably in the roomy carriages of the broad gauge Russian railway. Prior to the Revolution, Russian trains were regarded as amongst the most luxurious in Europe, and even today express trains, on these main lines, whilst shabby in appearance, are comfortable and fairly clean. All classes having been abolished, however, the modern traveller is obliged to travel "soft" or "hard." "Soft" literally means travelling in carriages with soft cushions, whilst "hard" means travelling in carriages with hard seats, and these, of course, correspond to the first, second, and third classes of former times. Food is the greatest problem on these journeys, as dining-cars seem to have vanished, and one glance at a wayside station destroys all desire for any closer acquaintanceship. The wisest plan is to provision beforehand and picnic en route, as fresh tea is always available, for the Russians are great tea drinkers and samovars are always boiling at every stop. It was quite amusing to watch the peasants troop out of their carriages, with tin mugs, kettles, and any other available utensil, and rush to the boiling samovars, then back to the train.

Maurice Hindus, in his graphic account of peasant Russia, declares that too much emphasis is being laid today upon the desolation wrought by the Revolution in once famous cities such as Leningrad and Moscow. Rather—he tells us—should we study the new methods in operation and seek to visualize what has already been accomplished in the slow and laborious effort to rouse the peasant from the depth of his age-long apathy and ignorance.

This is doubtless true, nevertheless, to the stranger coming into Russia for the first time. The drabness, shabbiness, and general air of poverty and depression which prevails—especially in Leningrad—is difficult to ignore. Buildings, formerly magnificent, look shabby and down at heel for lack of paint and repairs, the famous shops have disappeared and their windows are empty and boarded over, stones and rubble disfigure the streets, and a general air of dreariness is universal.

This is, of course, enhanced by the prevailing order of dress, which is that of the workman or peasant, and by the eternal bread lines. On almost every street—especially in Leningrad—we saw queues of people patiently waiting for rations of bread and meat, and for other commodities, such as boots, shoes and clothing. There is literally nothing to buy in Russia today—everything possible is being exported in order to secure foreign capital to finance the famous Five Year Plan—and money has, therefore, only a somewhat fictitious value, as of what use is money when no purchase can be made?

The lack of contrast in dress is one of the most noticeable in Russia. Style, as known to the normal world, no longer exists and clothes must conform to the new standard, which, we were told, was that of "comfort and hygiene," quite regardless—or so it seemed to us—of what suited the individual wearer. Generally speaking, the men wore working blouses, and the women cheap, drab, sack-like dresses, or light-coloured blouses over a short, dark skirt, barely reaching to the knees, with coarse, dark-coloured stockings—or often no stockings—and heavy shoes. In Leningrad, few hats were worn. The women generally had bobbed hair and went bare-headed, or used the peasant shawl, whilst the men had their heads closely shaven—apparently a popular fashion—and went bare-headed like the women, or wore a small, round cap. Of course, it must again be emphasised that the standard in everything is that of "the worker" and, there-

fore, "to dress well stamps one as a selfish person with capitalistic tendencies," a thing to be avoided at all costs. As one writer has pointed out, "the pity of it is that the dress is uniformly poor. The Soviet doctrine is to make all men equal—apparently to make all men workmen. An Englishman said to a Soviet official, 'You are trying to arrive at equality by making everyone a wage-earner. We want to arrive at the same result by making everyone a duke.' "

We spent three days in Leningrad and stayed at the "Europa," once one of the most fashionable of the Russian hotels, today still the best, but sadly shabby and down at heel. Our party was in charge of a capable young guide from the "Society for the Promotion of Cultural Relations with Foreign Countries," who arranged an intensive programme for each day, ranging from an inspection of the Palaces and Art Treasures of the former régime to a visit to the factories and modern workers' dwellings and health centres, the latter planned to give some idea of the aims and practical methods of the new system.

Contrary to popular belief, jewels and art treasures have been most carefully preserved by the Soviet Government, that is to say, so far as a casual observer can judge. We were taken through the Hermitage Art Gallery (now known as the State Museum) and saw not only treasures of statuary and art, but a marvellous collection of jewelled watches, snuff boxes, canes, and other objects too numerous to mention. In all Palaces and Museums we were obliged to wear carpet slippers over our shoes, in order to preserve the floors, which in many of the Palaces were extremely beautiful. One room in the Palace of Catherine II had a gorgeous mosaic floor, inlaid with mother of pearl, whilst in another room, known as the Portrait Room, the floor was of pink and black palmwood and polisander, inlaid in rich baroque designs.

A unique and interesting experience was a visit to the "Workers' Home of Rest" on Kamenni Ostrov (Stone Island), now known as "The Island of the Toilers." Here, amidst lovely groves of beech and lime trees, the rich St. Petersburg families had built their homes, surrounded with beautiful gardens. Today, these houses have been converted into "Workers' Clubs and Homes of Rest." We were taken through one of the largest, and it seemed a sad and incongruous spectacle to see the beautiful salons of former days, with their crystal chandeliers and statuary still intact, converted into dormitory bedrooms. Rows of little iron beds were ranged against silk-panelled walls, and beside them bare-footed peasant women, with shawls over their heads, were sitting patiently, sunk in an apparent apathy of indifference to all that was going on. Through the long French windows, which opened on to terraced gardens, vistas in imagination could be seen of their former glory, when the borders blazed with colour and the fountains played in the sunlight. Today, the flowers are gone and a rank growth of weeds flourishes undisturbed, whilst the fountains and statues are choked with lichen and green moss. It was impossible to look unmoved upon the ruin of these famous homes, where the sad ghosts of former occupants seemed to wander despairingly amidst a new, and, to them, mad and incomprehensible world.

Another interesting place was the Smolni Institute in Leningrad, founded originally by Catherine II as a boarding-school for girls of the nobility, and later—such is the irony of fate—converted into the Revolutionary Headquarters by Lenin during the fateful days of October, 1917. In the great white-pillared hall, where former pupils listened to instruction, the second All-Russian Congress of

Soviets decreed the transference of governmental power to the Soviets, after the occupation of the Winter Palace and the overthrow of Kerensky and the Provisional Government. Lenin and his wife lived here for several years, and his bare little rooms, furnished simply with two iron bedsteads, some chairs, and a plain deal table, are now preserved as a museum. Lenin is practically worshipped in Russia today. Not only has his body been marvellously embalmed, so that it has the appearance of life and is on view in Moscow in a mausoleum in the Red Square, but his statue is in all halls, museums, and schools, his picture is generally on the frontispiece of all books and pamphlets, and his portrait is hung on many walls. "Lenin is not dead, he lives forever," the Communists declare, and "his soul goes marching on."

Probably the most striking of the many palaces we were shown was the beautiful Catherine Palace at Tsarskoye Syelo (now known as Dyetskoye Syelo—Children's Village), some twenty miles outside of Leningrad. We were taken out by motor-bus, over a long cobbled road, fairly well-preserved, which ran in a straight line for miles over the flat country surrounding the city. A dreary, monotonous waste it seemed, with poverty-stricken little villages here and there, lacking everything in the way of gardens or orchards and with poorly-thatched cottages surrounded by a muddy yard. High up on the right hand side could be seen traces of the ancient road—now grass grown and marked by tall, grey mile posts standing like lonely sentinels in this barren land.

The little town of Tsarskoye Syelo was formerly used as a summer residence for the court; today the palaces and villas have been turned into museums, schools, hospitals and sanitoriums for children—hence its present name. The Catherine Palace is shown to visitors as one of the best examples of the magnificence practised under the old régime, and whilst the exterior presents the same appearance of shabbiness and delapidation as the buildings in Petrograd, the interior is beautiful, and the original furniture of the rooms, dating from the period of the Tsarinas Elizabeth and Catherine II, has been preserved almost intact. A long gallery runs the length of the palace, lighted by tall windows opening on to terraced gardens, now grass-grown and desolate, and leading into magnificent salons, decorated by famous artists of all nations, and still containing many priceless treasures. Of these the Amber Room is one of the most interesting. This room, the walls of which are panelled in exceptionally fine and artistically blended amber, was originally designed for Frederick I of Prussia by the architect Schlueter. The Prussian King presented it to Peter I of Russia, who had greatly admired its beauty, and the Tsarina Elizabeth ordered it to be transferred to its present home in Tsarskoye Syelo.

From this palace, our guide took us across to the Alexander Palace, which, after the Revolution of 1905, had been the residence of the late Tsar's family, who lived there to escape the dangers of the revolutionary capital, until they were taken away to banishment and death on the night of August 31, 1917. This palace has been preserved practically as it was left by the Romanoff family on that fateful evening. Photographs of English royalties and other intimate friends of the Czar and Czarina may be seen in the private apartments, whilst the Czarina's bedroom, with her marvellous collection of jewelled crosses and icons in a little alcove by the bed, is furnished as in her life-time. Even the brushes and combs have been left on her dressing-table, and everything looks as though the royal

occupant had merely gone out and would soon return. On the back of her panelled bedroom door, the story of her association with Rasputin, the monk, is told in a few words, illustrated by photographs and clever posters, and is elaborated upon by the Soviet guides, whilst her drawing-room, with its cushions, books, and music, has a pathetic air of use, as though waiting patiently through the silent years for the return of its mistress and its normal life. Our Soviet guides drew our attention to the contrast between the decoration and furnishing of the two palaces, and pointed out how far the late royal family had departed from the high canons of taste set by earlier monarchs and had become bourgeois in their ideas of comfort and arrangement.

From Leningrad we went to Moscow, where we spent about a week. Here the atmosphere seemed somewhat less depressing, as Moscow is now the capital, with a population of well over two millions, including a large proportion of factory workers, the favoured class in Russia today.

In spite of the many signs of poverty and depression, Moscow seemed like a fairy city, with its glittering spires and crosses, its walled fortress, the Kremlin, and its thousand treasures of art and jewels. After the warmth of colour and magnificence contained in its many palaces and churches, other lands seemed cold and grey in comparison, and it was often almost impossible to realize that this was a country still in the throes of Revolution where poverty and privation prevailed on every side.

Historically, our visit to the Kremlin was probably the most interesting, and weeks could be passed examining the treasures of the Oruzheinaya Palata, the Cathedral of the Assumption, where the rulers of Russia have been crowned since the 10th century, and other churches and palaces, too numerous to name. As we passed the Kremlin Arsenal, we saw a long row of cannon, stamped with the arms of France, and learnt that these had been captured from Napoleon by the Russians during the wars of 1812-1814.

One afternoon was spent in the grounds of the "Workers' Park of Culture and Rest," where, for a few kopecks, men and women can spend a whole day and enjoy a varied programme of lectures, games, baths, meals and other entertainments. This was a practical demonstration of supervised recreation, and the place was crowded with adults and children, all earnestly engaged in work or play. Everything possible in Russia today is organized, and life seems one long supervised lesson on Communistic theories and ideals. Museums and Exhibitions abound, portraying every possible subject, as, for example:—The Exhibition of the Protection of Maternity and Infancy, Museum of the Labour Unions Movement, Museum of Poultry Raising, Museum for Oriental Arts, Museum of the Revolution, Russian Historical Museum, Tractor Museum, and the State Toy Museum, to quote only a few examples from the long list given in the official guide book of the Soviet Union for the City of Moscow. We visited several of these, two of the most interesting being the "State Tretyakoff Picture Gallery," which presents an exhaustive picture of the development of Russian painting up to the present time, and contains some 6,000 pictures and works of art; and the Museum of the Revolution of the S.S.S.R., housed in the beautiful palace of the Razumooskis—later used as the English Club—and portraying the history of the Communist Party and of the Russian Revolutionary movement.

Religion is not encouraged by Communistic Russia today, and many of the

famous churches are either falling into delapidation and decay, or else being turned into "Anti-Religious Museums." The Church is held up to contumely, as part of the hated old régime, "where the tyrannical triumvirate, the Czar, the Church, and the Capitalists ruled and ground down the proletariat."

We visited one of the most famous of these anti-religious museums in Moscow and saw the treasures and relics of churches, monasteries, and convents displayed according to a carefully thought-out plan, which, by clever propaganda and excellent poster work, exposed the weaknesses and corruption of the former system,—treated religion as an out-worn superstition and pointed the way to a future lit by the light of science and modern invention and free from the thraldom of an oppressive domination. Services are still held in a few churches, however, and we heard glorious music in the Church of the Resurrection in Leningrad, erected on the spot where Alexander II was assassinated by a bomb on March 1st, 1881, and in the Cathedral of St. Sophia, in Kiev, where the vestments of the officiating priests were especially magnificent.

Home life is considered out of date by the young Communist, and communal restaurants, dwelling houses, clubs, and reading rooms are the order of the day. We were taken to see the Moscow Dinner Factory, a three-storey building standing on the outskirts of the town in the neighbourhood of three factories, from which its chief clientèle is drawn. The large windows on the street-level are devoted to the sale (when they can be obtained) of fruit, sausage, tinned foods, ready-made salads, boiled and smoked fish, and a long list of semi-prepared foods, such as minced meat formed into rissoles and egg-and-bread crumbed. We saw a few of these foods displayed and watched dinner being served to the workers in large, airy rooms and on the roof garden. After dinner, the workers can rest in lounge rooms, or play games, and we saw many of them earnestly engaged in chess, which seems very popular in Russia. The manager of this factory told us that they served, on an average, 12,000 dinners a day, and that, in order to supply the meals of the entire population, forty such factories would be required. Actually, the Five-Year Plan provides for eleven, but he felt that this number might be increased. Another feature of this experiment is the sending out of vast thermoses to dining-rooms and factories in the district, all with the idea of furthering the slogan of "public kitchens" in the Soviet Union and "emancipating the woman from the slavery of her home." We inquired whether the capable-looking manager of this new establishment had received any training for his position prior to the Revolution, and he replied in the negative, stating that he had been merely a factory worker in the ordinary way. It was interesting to find a small chemical laboratory attached to this building, where a woman chemist was engaged all day upon experiments at all stages of raw and cooked food. How efficiently these were carried out was difficult to judge, as none of our party were experts in this particular development, but even its conception seemed a great advance on former methods.

One morning, we visited a modern gaol on the outskirts of Moscow,—a unique experience. Gaols in Russia today are known as "isolators," for the Communists argue that illiteracy and ignorance are largely responsible for crime and that, as the community at large must be safeguarded, criminals must be "isolated" in these buildings during the process of salvage and education necessary for each individual. This particular gaol was supposed to be the strictest in

Moscow—or so we were told. It housed some thousand prisoners, and the crimes varied from murder to petty theft. The prisoners received a wage of about 20 roubles, three-quarters of which they kept, the remainder going to the authorities. There was a factory attached, where we watched prisoners weaving coarse, brightly-coloured materials, which, we understood, were sold by the Government. We were also allowed to visit any of the cells and found them fair-sized dormitory rooms, light and airy, where the prisoners had iron bedsteads covered with straw mattresses. We were told that there were radios in these cells, and were shown the prison theatre, where plays and movies were produced,—the wall newspaper, compiled by the prisoners themselves, and were also told that during the summer months prisoners were allowed to return to their villages for a period varying from three to four weeks.

Apparently some type of honour system, such as that once tried in New York, is being used, as we were informed that only a few guards were required and good behaviour prisoners were promoted to positions of authority. On inquiring what percentage of men reverted to their former practices, they told us about 33%, but these mostly committed minor offences, such as petty theft. The prisoners are divided into groups of "Totally illiterate," "Partially illiterate" and "Industrial workers," and apparently are educated and employed under these several headings. An interesting experiment this, but as to its practicability, we were left wondering, and insensibly thought of those other political prisons where death seems a merciful escape from conditions of horror too often described and corroborated to need repetition. "These are enemies of our system and must be destroyed"—such is the Communist argument in all matters relating to members of the former régime, who are known as the "Other People," and live in hiding with no rights and little hope.

In a long bare office room in Moscow, with a wooden counter running down the centre and a glass-partitioned room at one end, marriages, divorces, births, and deaths—the whole cycle of human existence—are briefly dealt with and carefully recorded. We spent an hour in this Marriage and Divorce Bureau and watched three divorces granted in fifteen to twenty minutes ex parte, in each case to women, though we understood this was accidental, as either sex might apply. It seemed an easier process than obtaining a driving licence in other countries, and from what we could understand of the procedure, identification of the parties seemed the only requisite. No questions were asked and no reasons given. The Communists feel that divorce is a private matter between the parties and that each individual must have good and sufficient grounds of complaint before resorting to such a serious remedy and that, in any case, it was not their business to interfere. Of course, the existence of children alters the situation, as the law makes their support obligatory by both parents, and, in divorce, the amount of such support is determined by the Courts according to the material circumstances of each case.

From the Divorce Section, we wandered across to the glass-partitioned office in the corner and watched the magistrate marry two bashful couples, who had been waiting their turn for some time. Our guide explained that there is no difference today in Russia between a common law and a legal marriage. "Common law or registered marriage is the private concern of the interested parties," and today the latest Soviet law has established complete equality of children born from either registered or non-registered marriages.

From Moscow we went on to Kiev, the picturesque capital of the Ukraine. We took the night express from Moscow and saw, for the first time, the amazing spectacle of Russian peasants with their families and household chattels camped out on the station floor, awaiting their turn to entrain for their destination. Except on the main lines, trains are an uncertain quantity today in Russia, and their time of arrival or departure seems to follow no known or discoverable rule. However, time means little to the average Russian, and entire families, with their numerous bundles grouped about them, slept placidly and unconcernedly on the station floor, paying no attention whatever to us as we stepped over them or picked our way carefully between the groups.

After a hot and dusty journey of a day and night, the sight of ancient Kiev, built high amidst its terraced gardens on the banks of the Dneiper river, looked cool and restful. Closer acquaintanceship somewhat dispelled this illusion,—nevertheless, in spite of such discomforts as strange meals, heat, and thirst, we found the city quaint and charming and less visibly touched by the desolation wrought by the revolution than those we had previously seen.

Again, we had a varied programme. One morning we were taken to see the "Lavra Monastery," oldest and most important of the monasteries under the former Russian Empire, dating from the eleventh century and formerly the scene of many famous pilgrimages from all parts of Eastern Europe. Today it sleeps deserted amidst its dusty and neglected gardens. It is partly used for a museum and partly as a home for disabled soldiers, but one feels that its real life is over and only an empty shell remains.

In vivid contrast was the Jews' Market, where, on a brilliant Sunday morning, all the life and colour of the East seemed congregated in the hot sunshine. Even here the revolution cast its shadow. However, on the whole, it was a fascinating scene, full of life and colour, and we found it hard to tear ourselves away. Had we wished to join the rank of sellers, we could have sold many of our own possessions, especially furs, which excited envious glances wherever we went and which were bid for many times over.

A symphony concert in a moonlit garden, an evening spent at an out-door theatre, and the inspection of a modern "movie" factory on the outskirts of Kiev were amongst a few of the varied attractions of our last Russian days. The latter visit was a surprise, made possible by the vagaries of the Russian railway time-table—our train to Warsaw being six to eight hours late. At the factory we were shown a film called "The Land," which portrayed the struggle between the younger peasant generation, with its aspirations and ambitions to invade the field of science and rise to some higher plane, and the older muzhik, slow to move from his century-old attitude of serfdom and servility, and distrustful of new methods and new ideas.

Toward evening, our train wandered casually into the station, and with much conversation and gesticulation, huge, bearded porters in faded blue blouses deposited our various chattels on board. Then the little train steamed thoughtfully away toward the Polish frontier and we realized that at last we were actually leaving this land of strange perplexities and vast conceptions, where the greatest experiment of modern days is being worked out for good or for ill. Will it succeed? Will it fail? and in either case, what does the future hold for Russia? Not even the wisest can prophesy.

A Canadian Architecture

By J. Campbell Merrett

WHENEVER the opportunity presents itself, Canadians are reminded of the promising future awaiting our country. Each distinguished visitor apparently feels it a duty to present to the Canadian public a flattering portrayal of the past, present, and future of Canadian history. Our native leaders in every field, too, snatch at chances to remind us of our unlimited natural wealth and undeveloped resources, and the Press annually carries New Year messages laden with brilliant visions of prosperity to come, and inevitable expansion which will prove even greater than that which has taken place in the years since Confederation. We Canadians add the necessary grain of salt, discount the flattery and the greed for publicity on the part of the flatterers, and still find it permissible to believe that our country has a large part of what is claimed for it—assets which, if reasonably used, may turn Canada into one of the most desirable countries on earth in which to live.

And at this point, let us qualify our belief by adding to "one of the most desirable countries on earth in which to live," the condition "providing there are beautiful buildings to live in." This automatically suggests the questions: Shall we have beautiful buildings? and can we rely on Canada's architecture to keep pace with Canada's science and industry? Before we seek an answer to these questions we must study the position in which we find ourselves today.

Canada has a peculiar architectural inheritance, made up of several traditions, one or two genuinely Canadian, of which we may reasonably be proud, and some cosmopolitan, which, unfortunately, cannot be ignored. The foremost of our local traditions is that of the old French-Canadian architecture of the Province of Quebec. The early settlers of French Canada produced a completely Canadian style, which, modest as it may have been, was charming and individual. To the domestic work and early church work, until the art became a conscious effort, one might apply the words used by Morris when speaking of a school of English work: "It strove little to impress people by pomp and ingenuity . . . sweet, natural, and unaffected, an art of peasants rather than of merchant princes or courtiers."

Three distinct types of Quebec houses offer valuable inspiration for modern residences in town and country, and it is gratifying to notice a rapidly growing appreciation of this fact, and to see many well adapted versions of these pleasant old cottages being erected.

Besides the Quebec school, the oldest and most Canadian, there are provincial traditions, notably in Nova Scotia and Ontario. These are based on American Colonial work, which was imported by the United Empire Loyalists and to a certain extent Canadianized.

Since the English came to the country, architectural traditions have been augmented by various English styles, and later by the cosmopolitan Classic and Gothic revivals and the Norman Shaw school; which, together with the occasional French influence and the newer forms of American academic, chiefly under McKim,

have in the last sixty or seventy years produced the confused muddle of work all too familiar to the Canadian citizen. About most of it is apparently nothing Canadian, (disregarding possibly a few minor and unnoticeable technicalities of building construction).

The outstanding exception would appear to be the Canadian Railway hotels, a series of which have comparatively recently been built across the country, started by the Château Frontenac in Quebec, the clever idea of an American architect, in compliment to Canada's romantic past. These buildings, from coast to coast, are impressive and picturesque, and incidentally exceedingly fine hotels, but they cannot be classified as examples of a typically Canadian architecture, being adaptations of an architecture essentially French.

It is obvious, therefore, that any local traditions are confined to domestic work, and are quite unadaptable to modern public buildings. It is unfortunate that Canada should have begun to expand in the middle of the last century, when architecture throughout the world was at a low ebb. The public buildings demanded by this expansion were of necessity bad, yet they are all we have on which to base a traditional public architecture. Apparently, then, Canadians will have to develop a new public architecture.

Canadian architects realize this, yet in trying to break away from the plagiarism of the past, the majority are falling into a new period of copyism. In contemporary design throughout the country one finds chiefly a tendency to imitate the modern American school; and, what with artificial mediaeval cathedrals, Roman baths, and English manors, most of the work of this school has little progressive value. Even the only really modern development, the skyscrapers, with a few exceptions, to quote Professor Nobbs, "are bedevilled outside and in with the second-hand loot of the traditions of all the ages." But whether American architecture be good or bad, by imitating it we can never produce a Canadian school, and we shall soon be in a worse state than that from which we are endeavouring to free ourselves.

Wherein, then, lies our chief hope for Canada's architecture? In a word, the answer is: In the sane and sober solutions of the problems imposed by conditions of climate, materials, and society.

I have said that, in attempting to be free of past cosmopolitanism, we are exposing ourselves to a new epidemic of it. No cosmopolitan architecture ever has been, or ever will be, a great architecture. Though it be world-wide, it cannot approach the art of even a truly fine school confined to a small locality. It is unreasonable that an international architecture of standard forms and ideals should be as beautiful as one which truthfully and completely expresses the tradition and life, and answers the problems of, a single country, or even of a single part of a country. Imitation is as bad as standardisation, and when it becomes a fashion to admire the art and culture of a foreign people, the resulting imitation is mere conceited make-believe.

Canada is particularly favoured to avoid standardisation and imitation. In 3,000 miles of vastly changeable landscape there are several types of climate, with extremes of heat and cold, thus imposing structural requirements, which, if properly observed, should make our future public architecture as distinctly Canadian as were the little houses of early Quebec. We must consider cold. The condition which led the French-Canadian to build squat, compact houses to retain warmth, might conceivably lead us today to determine a bay design which

would satisfy requirements for economical heating in relation to floor areas and necessary lighting; and such a bay in Quebec might differ from the economical bay in British Columbia. Such a restriction may or may not produce a localism, but it is fairly obvious that buildings of the type being erected in Europe today, with their uninterrupted horizontal glazing and necessary expensive cantilevering, if suitable for warm climates, can never be economically built in Quebec. The extra light obtained (of necessity illogically distributed) would not warrant the added cost of heating.

Again, we must be careful of snow on our buildings. We must not use steep roofs on our street blocks, for the slide of snow which momentarily engulfed an old habitant, as he stepped from under his bell-cast, might kill a pedestrian were it to fall from a twentieth-storey roof. We must also avoid certain forms of eaves, cornices, and parapets, which would be easily damaged by collecting ice and snow.

There is less chance of localisation being affected by materials today than even a few years ago. Manufactured materials are standardised and easily obtainable all over the continent. Natural materials are imported from far away, and local products rarely receive preference. Sir Christopher Wren wrote that architecture has its political use. Being the ornament of a country, he argued, it draws people and commerce and makes the natives love their country. One might remark that politics have their architectural use—"keep foreign building materials out of the country and help the national school" might be the campaign platform of an architecturally-minded statesman.

Concerning materials, however, let us remember Ruskin's Lamps of Truth and Sacrifice. There are hundreds of new materials at our disposal. Let us use them honestly, not imitating stonework in cement or plaster, or woodwork in metal, or erecting a mediæval roof-truss when the roof is truly supported on a steel frame. We may use new materials and old materials in new ways, but if an old time-worn solution to a problem is still the best, why should we discard it in favour of a novelty?

The Lamp of Sacrifice is, of Ruskin's Seven Lamps, perhaps the most applicable to modern design: "Better our work unfinished than all bad . . . if you cannot afford marble, use Caen stone, but from the best bed; and if not stone, brick, but the best brick . . . ." Let us avoid the appearance of cheapness in our work, and remember always the value of the skilled craftsman.

The question of the social requirements of architecture immediately opens up a wide field for discussion, and invites unlimited speculation. Under this head, of course, comes the problem of expressing the manner of life and society in the country, a factor which has today a remarkably small tendency to localism, for life is rapidly becoming practically standardised throughout the civilized world, and the types of buildings required in one country are also required in another. Industrial buildings might offer an exception to this rule, but we cannot expect Canadians to be satisfied with a national architecture of grain elevators, impressive though these structures may be.

Besides this part of the social element is the important factor of public taste. At the present time, among architects, the battle between traditionalists and modernists is almost as fierce as that between Gothicists and Classicists a century ago. How long this conflict is liable to continue none can say, and the best anyone can offer on the subject of controversy is personal opinion.

One of the most important parties to architectural endeavour is the client, and the client's taste is generally based on what he sees about him. We have seen that in Canada this consists of a kaleidoscope of charming French-Canadian houses, sensible Colonial and Shaw domestic, a little good McKim classic, a little more meaningless, copied modernism, and a surfeit of atrocious Victorianism.

Not a few Montreal clients are allowing their architects to build them residences in cleverly adapted French-Canadian style. One hopes that this tendency may gain ground throughout the Province, and that the other provinces, chiefly Ontario and the Maritimes, may similarly revive their traditions. One's hopes are almost shattered on seeing erected next to one of these fine modern Canadian houses, a crude, illogical, and generally deplorable attempt at "modernistic." We can be modern without being modernistic. The whole principle of the domestic works of Norman Shaw in England and of the public work of Ludwig Hoffman in Germany was as modern as one could desire, and if modern building is demanded, let it be designed on such principles of modernism, not blindly copying such men as Wright and Le Corbusier simply for effect and novelty.

The best hope for modernism is to temper it with tradition. It has been claimed that in all the recent new schools of art, the best work has resembled some simple work of the past, but that it has been reserved for modernism to be "irritated at any resemblance to anything that has charm, and to adore excess in every direction, to be shapeless, crude, eliminated in detail to nothingness, explosive in detail to chaos." This enthusiastic traditionalist goes on to say "it may change its methods, but when it does it will necessarily have in it traditions of sound previous methods, with which at present it is in arms."

But I am drifting away from Canadian architecture. I have attempted to avoid the danger of direct prophesy, but, protected by several provisions, I shall be bold enough to answer the initial questions on Canada's architectural future: we can certainly develop a beautiful Canadian architecture—a national style with localised schools, if we can first fulfil a few requirements.

We must teach the public what they should demand. The easiest means to this end is through publicity for worthy buildings and through clients, especially the influential ones, such as municipalities, department and chain stores, industrial firms, banks, railway companies, and similar wide-spread institutions.

We must have co-operation within the architectural profession, that the East may know what the West is doing, not in order to unify the efforts of East and West, but simply to exchange problems and ideas. Two excellent ways of achieving such co-operation are the encouragement of Canadian architectural magazines, and of nation-wide competitions between architects and between the schools of architecture.

We must reduce the adverse influences on architecture by town-planning laws: zoning, developing parks, and restricting eyesores in the form of misplaced advertising.

And finally, and most important, we must cease to imitate—cease to be style-mongers, whether the style be centuries old, or the invention of a contemporary modernist; and we must solve our own new problems with our own new materials in our own new ways, always provided there is not already a better solution for which we are indebted to the past.

A Holiday Visit to Siam

By H. F. Collier

HAVING always found interest in the advertising matter of steamship companies, more particularly those trafficking in the lesser known parts of the world, we had often read in the Shanghai and Hong Kong papers notices of steamships sailing for "Marseilles, London and Ports," and the phrase "and Ports" had always intrigued us, conjuring up pictures of hot and sticky places and variegated people. For this reason, when opportunity was afforded to see something of these ports, we were not slow in availing ourselves of it, and accordingly my wife and I sailed out of Hong Kong Harbour one bright afternoon, bound for Singapore and "Ports." We booked on the *Chenonceau* of the French Mail, or Messageries Maritimes, as, though this boat took two days longer than the P. & O. *Rawalpindi*, which was due to leave two days later, she gave the added thrill of a short stay in Saigon in Indo-China.

On the third day out from Hong Kong, we reached the mouth of the Mekong River, and a few hours steaming up the river brought us to Saigon. The river is narrow and winding, the banks low and monotonous, with nothing visible from the steamer but miles of paddy fields, with the tall iron chimneys of rice mills in the distance.

The port of Saigon stretches out along the two banks of the river, but the main wharves are on the left bank as the ship enters, and one is pleasantly surprised to see the long concrete wharves and the ships of various countries loading and unloading. As we steamed up the river, we passed rusty looking tramps flying British, French, Japanese, German, Danish, and Norwegian flags, loading rice, pepper, and other produce.

As the Red flag of Revolution had been fluttering in the inland districts, there was an assemblage of French cruisers and gunboats in the port, and each day a company of poilus paraded the streets, but they were not allowed the freedom enjoyed in other ports, and so few were visible in the evenings.

The town of Saigon is large and populous, with a motley assortment of inhabitants, Annamites, Malays, Chinese, East Indians, and French being seen on the streets. It has been termed the "Little Paris of the East," and perhaps the heart of the town deserves that title, for the shops are excellent, displaying a large variety of French goods, and the hotels, with their boulevard cafes, no doubt give some poor exiles a taste of the life from which they are separated.

We had been told that it was a place that one would be thankful to get away from after twenty-four hours, but we found it interesting, and the residents with whom we came in contact were most courteous and friendly. The most interesting place in the city that we visited was the Botanic Gardens, which, though lacking the natural advantages of the Gardens of Singapore and Kuala Lumpur, were artistically arranged and showed to advantage specimens of many beautiful trees and shrubs. Here we found also a Zoo composed of numerous native birds and animals, which, in spite of captivity, thrived in the climate to which they were accustomed. The bird exhibits were particularly fine and even in the cages the

majority of them had built nests and were rearing their young. Around the shores of a lily-covered lagoon, several storks and cranes walked and flew at liberty, and one pair had their nest amongst the roots of a huge tree, within ten feet of the roadway.

After three enjoyable though hot days in Saigon, we left for Singapore and arrived there two days later. Singapore, like Hong Kong, but in a greater degree, enjoys the distinction of being a transshipping point for much freight, and the port looked crowded and busy. The streets present an even more motley appearance than those of Saigon, as Sikhs, Bangalis, Annamese, Chinese, Malayans, and Europeans jostle each other, showing a wide variety of dress and undress.

The city has some beauty spots in the outskirts, with an excellent Botanic Garden, but we found there the real tropical heat, and so did not linger long. We had been warned on the boat that Singapore was hot. One of our table mates, a genial Scot, travelling for a Scotch brewery, told us that his Christmas treat in Singapore had been to melt several cakes of ice in his bath water, and spend the day pouring the water over himself. We did not quite come to that, but we decided that it was too hot for sightseeing, except for a couple of hours spent in the Botanic Gardens, which well repaid the energy required. The Gardens are beautifully laid out on a gently rolling landscape, which lends itself to artistic planting, and there was a good display of poincianas, laburnums, and other flowering trees and shrubs. One portion of the Garden is arranged to represent a path through a Malay Jungle, and its damp shady recesses, steaming in the heat, give a good idea of what the untouched jungle must be like. The simulation is heightened by a troop of monkeys which roam at liberty amongst the trees. There were about fifty of them. Probably twenty were mothers, with the most comical babies hanging on to them. The mothers seemed to be unconcerned as to the safety of their youngsters as they dashed about, or jumped from branch to branch. The responsibility of not falling off was put on the babies' shoulders, and they hung on with hands and feet and sometimes teeth. The boss of the troop was a peppery old male who evidently held his post of importance by reason of his strength and viciousness, for he dealt out blows freely and indiscriminately to his followers.

From Singapore small steamers, with names reminiscent of Ulysses and the heroes, operated by the Straits Steamship Company, ply along both coasts of the Malay Peninsula; also to Borneo, Siam, and neighbouring countries, and we had been advised that a trip on one of these boats would give a good introduction to the atmosphere of Malay life. As we looked out from the Bund at these little steamers riding at anchor, there seemed to be about a hundred of them, all about the same size and all showing the blue funnel which marks their affiliation with the Blue Funnel Line. According to the papers, there seemed to be four or five leaving each day for various ports, and the difficulty was which one to choose. Finally, a photo of a wave breaking on a palm fringed beach, which was entitled "Bathing Beach at Port Dickson," decided for us and we booked by the *Circe* to leave at 4 o'clock that afternoon.

When we woke next morning we were coming alongside the pier at Port Dickson and an hour later were established in an airy room at the Government Rest House set in a grove of cocoanut trees, bordering on the beach that had allured us. The bathing here was good, though the low tides caused us to wish we could bathe outside the enclosure, but besides sharks, large alligators might be seen swimming

near the beach, and bathing outside the enclosure was consequently inadvisable.

We visited a large rubber plantation near the town and saw the process of preparing rubber for export. On this plantation most of the labour was East Indian, but some Chinese were employed for bleeding the trees, and we were told that whilst the Indians only averaged about 350 trees per morning, the Chinese would easily do 400. When the milk-like sap is brought to the settling-house each day, it is mixed with water and a small percentage of formic acid as coagulant and allowed to stand over night in large shallow tanks in which the rubber coagulates into a jelly. The jelly is then passed through a series of rollers which gradually squeeze it down into thin sheets.

We left Port Dickson by motor and after an hour's run over a perfect road, reached Seremban. This is in the heart of the rubber district, and in spite of the depression in the rubber market, and curtailed output, there seemed to be tremendous quantities in transit.

Poor Malaya has been hard hit during the last few years. The former high prices for rubber and tin over-stimulated these two basic industries of the country, and now the producers are paying for their fat years by having to curtail and retrench. They are fortunate, however, in that their currency is upon a gold basis, so that they do not have the additional suffering of their brethren in Hong Kong, who have seen their dollar drop with that of China as the silver market has tumbled.

At Seremban, we boarded a train for Kuala Lumpur, the capital of the Federated Malay States, a new city, beautifully situated among the hills. Having four hours to explore the city, we hired a motor, which took us past the fine new Government Buildings—like the station, in Indian architecture—up and down the hilly streets where were shops of every nationality, through the Botanical Gardens, and along many beautiful roads in the outskirts of the city, where the foreign bungalows nestled in their large beautiful gardens. We were interested to learn that many of the most palatial residences were owned by wealthy Chinese.

We got on board the Penang train at 8 p.m., and found ourselves in a charming little stateroom opening off the corridor. Here were two beds with snowy mosquito-nets and pillows—a basin with running water and electric fans. After a comfortable night, we rose before dawn in order to be ready to take the ferry at 6 a.m. on arrival at Prai. This ferry crosses the harbour to Penang.

Penang is on a mountainous island and, as at Hong Kong, the harbour is the strait between the island and mainland. The harbour was crowded with picturesque native craft, Chinese and Indian, with here and there a dingy tramp steamer or a spruce ocean liner.

It was about 6.30 a.m. when we reached Penang, but already the paved streets were radiating heat. The streets were wide and clean and, although so early, were filled with the usual wonderful medley of people which one meets in the "Ports." There is a large Chinese quarter, but naturally the East Indian is in the majority.

Time did not permit us to see the uptown residential districts so, after getting our breakfast in the Station Restaurant on the Penang side, we again enjoyed the half-hour's sail across the harbour to Prai, where we found awaiting us another comfortable train running on the F.M.S. and Royal Siamese Railways. On this train we took a through carriage to Bangkok, where we were due the following

afternoon. Besides having staterooms with running water, and excellent dining cars, the trains of the Royal Siamese Line are equipped with shower-baths, which proved refreshing and invigorating as we passed through the hot jungles of Malaya and yet hotter plains of South Siam.

The journey through Northern Malaya was most beautiful and interesting, going through rolling forest-clad country where jungle alternated with miles of rubber plantation—with here and there a river, and in some districts glimpses of tin mines.

After entering Siam, however, the climate is dryer, the rolling hills are grass-covered, and many herds of cattle are seen grazing. There are quaint villages of thatched and wattled houses, and near the villages groves of palms from which they extract palm wine. We saw many natives shinning up the bare trunks, or clambering up rude bamboo ladders, with large calabashes hung from their waists to collect the precious liquid. As we approached the sea, the country became more level, and as far as the eye could see were rice-fields, and we understood one reason why it was possible for Siam, with one crop a year, to export rice to China.

On the afternoon of the second day, the train drew into the large and modern station of Bangkok, and we had reached the last of our "Ports." We were fortunate here in being guests in a Canadian home and enjoying the hospitality of a former McGill student and his wife, through whose kindness and knowledge of the city we were able to see a great deal in a short stay of three weeks.

Bangkok is unlike most Eastern cities in being comparatively new. It was built by a king of Siam about 150 years ago, and has been adorned and beautified by the kings ever since. As many of the Royal Family have been educated in England, the city reflects their Western tastes, but it also shows their Eastern instincts for gorgeousness and display. It is situated on the delta near the mouth of the River Menam, where the land is scarcely above sea-level, and the whole country-side is intersected with canals or klongs.

The city is extensive and planned like a Western one with wide, fairly straight streets, at regular intervals, but along the side or middle of many of the streets run canals crowded with barges, canoes, and all sorts of quaint boats, and crossed by high-arched bridges, giving the city a Venice-like appearance. The buildings, however, are far from being Venetian, most of them being of wood and only one or two storeys high, owing to the difficulty of getting firm foundations.

Many of the Siamese live in long, low, flimsy wooden sheds, built along the edges of the canals, which serve as drains, but also give the advantages of bath-tub and laundry-tub. As the tide fills and empties them twice a day they are kept passably clean for the East. In the native section of the city are tangled networks of streets and alleys intersecting the blocks between the main thoroughfares, and here you may see the native craftsmen at home. Some are kapok dealers, making mattresses and pillows of tree-cotton or kapok. Others are grinding zicons, which are like inferior diamonds of various colours. Dishes of pink, sea-green, blue, and yellow jewels are exhibited in sparkling array under glass cases by the roadside. Most interesting of all are the silver shops, where bowls and boxes of exquisite chased workmanship are hammered out, and the silver belts are made which the natives use to support their penungs or skirts.

Outside this native quarter are wide streets, with a great variety of foreign shops carrying an assortment of goods at high prices. As you reach the outskirts

of the city, the broad streets become even broader avenues, shaded by wide-spreading trees. On each side are villas in their luxuriant gardens or compounds.

There are no typhoons or great storms in Bangkok; it is never cold and seldom unbearably hot; the police are efficient and there are few robbers, so that quite flimsy-looking structures serve to protect one's life and property. The house in which we stayed was three storeys high, built of wood, and a large part of one side was of open lattice-work. The villagers' houses seemed to consist usually of either lattice work or wattle with palm-leaf roofs.

We were fortunate in being in Bangkok in the height of the mango season. And such mangoes! Long, yellow, luscious! After being on ice for a few hours they were the last word in deliciousness. But we had heard the fame of a strange fruit, called the durian. Guide-books gave most enticing accounts of it, and we had looked for it in every market, but so far in vain. At last we saw a piece of unmistakable durian rind hanging from a vendor's cart. Durians, then, were to be bought in Bangkok, and our hopes rose! Later we saw several being sold on the street, but it was always when we were passing in a car and could not get to them. However, one day we succeeded in buying one for $1.00 and hurried home to put our prize on ice until dinner time.

There was a decided twinkle in the eye of the Siamese chauffeur when we made our purchase. The Chinese house-boy received it and prepared it with Eastern stolidity. Inside the rind the fruit was in sections of uneven size, each with a stone in the middle. It closely resembled a jak-fruit—yellow, soft, and rich-looking, but the aroma was beyond all description. It has the most horrible smell imaginable, and so pervasive that the whole house was full of it. We each boldly ate a section; the taste was not bad, though not comparable to the soursop, but thereafter for almost 24 hours we felt our whole being to be reeking with those horrible durians. So much for durians! Afterwards they became plentiful, but though we found whole markets full of them, we let them lie. The Siamese appreciate them, but we do not!

Of course, when in Siam, you expect to see the famous White Elephants! So we obtained a pass to see the Throne Hall, Royal Palace, and White Elephants. The new Throne Hall is a very new building, by an Italian architect in Italian style. It is largely built of Carrara marble, with beautiful pillars and pavements, and capped by a great dome. The difficulty of finding a foundation for so massive a building makes an interesting story, but finally the architect floated it on great pontoons. It has an exquisite situation at the end of a long avenue, and forms a beautiful picture from many points in the surrounding grounds.

From the Throne Hall we proceeded through the Royal Park to the stables, where the White Elephants are on view. They certainly have white eyes and their shabby hides are a pale grey, but the poor things are disappointing and look most miserable, fore and hind feet tied with thick ropes, so that they can hardly move. Outside the Elephant Houses are cages, with white monkeys and a white crow. Formerly the kings of Siam went to all State functions and made royal progresses mounted on elephants, but the present king prefers an automobile and the elephants are falling into disuse.

Leaving the elephants, we went to the Royal Palace. It includes a large block of buildings with temples, palaces, government offices, and the Old Throne Hall, all together in a great garden. The whole thing beggars description—so brilliant,

so gorgeous, so different from anything ever seen before. The walls of the temple are of stucco, inlaid with glass mosaics of rich colours, such as lapis-lazuli blue and amber yellow. The roofs are of glazed tiles of brilliant colours, vermilion, green and black. The architecture must be seen to be described. There are enormous and exquisitely proportioned doorways, large enough to admit an elephant and his howdah. There are long flights of steps leading to fairy-like pavilions, and balconies glistening with glass mosaic. The gardens show no shade, but are laid out with flowering shrubs, monkey-puzzle trees, hedge-bordered paths, and wierd stone statues. Over all the dazzling tropical sun.

Among the temples of this great block of buildings is a small copy built to scale of the temple at Angkor. Siam is a Buddhist country and all the temples, or wats, as they are called, are dedicated to Buddha. They usually include a Buddhist monastery. In the city of Bangkok alone there are said to be over three hundred wats, some old and famous, others modern. The main features of most are similar. There is a large oblong hall built of stucco, and usually decorated with glass mosaic on the outside. The high-pitched roof is usually of glazed tile. Inside this hall, one end is given up to the idol, a gilded representation of Buddha, seated on a dais, surrounded by offerings. Great candles and sticks of incense burn in front. The walls from floor to roof are painted with representations of the life of Buddha. Some of the idols are of enormous size. The Reclining Buddha is about 115 feet long. His foot from heel to toe is 15 feet high. The Emerald Buddha is famous, as it is supposed to be carved out of a single enormous emerald, but modern investigators declare that it is only green glass.

Outside the main hall there are many characteristic monuments called krangs, tall, graceful spikes rising from pedestals, some of them beautifully carved in ringed bosses. These krangs are seen to advantage at Watt Chang, a very beautiful temple across the river from Bangkok. Here are also five ornate pyres, rising high into the air almost from the water's edge. The one in the middle is the tallest and is built with three balconies or terraces reached by steep stairs. All five of these monuments are strangely decorated with designs in china. Dinner plates have been broken and chipped and set in the plaster to form 5-petalled flowers. Cups, bowls, plates, and dishes are in this way arranged to form flowery patterns and the result is quaint and artistic. Besides the native ware with its crude colouring, we recognized many familiar foreign patterns among the crockery thus sacrificed.

In addition to these porcelain decorations, there were bas reliefs in plaster showing angels and demons. The angels were represented with woman's body, clasped hands, and rather sublime expression, but with the tail and legs of a quite legendary bird. The demons were griffin-like creatures with thoroughly demoniacal expression.

Several of the wats had realistic representations of the Buddhistic idea of Heaven and Hell. Hell showed the tortures of the damned. Heaven, in a series of terraces, showed the very materialistic delights of the blessed. Animals enter largely into the symbolic pictures in the temples, as the Buddhists believe in transmigration of the soul. In order to understand the wats, with their pictures and decorations, one would require to have a deep knowledge of Buddhism, its faith and legends.

Though there was so much of interest to be seen in Bangkok, we were glad to have an opportunity to spend a few days in the country about 40 miles up the

River. Here was one of the teak collecting stations of the Swedish East Asiatic Company, one of the largest exporting and importing concerns in Bangkok. We were the guests of some members of the staff in their teak-built bungalow, which floated on pontoons by the mouth of one of the numerous klongs which give access to the country distant from the main river. At this point, as at many points along the river, thousands of teak logs are held in by booms along the river edge, many of them 2½ and 3 feet thick and 25 to 40 feet long.

The villages are spread out along the river and klong banks, the houses and shops being built on piles above the rise and fall of the tide. The living platform, upon which the family lives and moves and has its being, is reached by light ricketty-looking ladders, at the foot of which are tied the family "flivvers," in this case various sizes and styles of boats, some rough-looking dugouts, some delightfully modelled little teak canoes which, though they look like toys, will safely carry grown men. We tried our skill at paddling some of these boats, but with trepidation, lest we should provide free amusement for the spectators, as we found them as "tippy" as Canadian racing canoes, although the natives paddle around unconcernedly with the little boats piled high with cocoanuts, mangoes, clay pots, or other merchandise.

Siam, as mentioned previously, being one of the leading Buddhist countries in the world, the priests play an important part in the life of the people. By law, every young man has to study for a period in a monastery, unless he prefers to do service in the Army, Navy, or Police. The priests control many of the official functions and fix the auspicious dates. Whilst in Bangkok, we had the privilege of seeing the "Ploughing Ceremony," which officially opens the rice planting season, the date of which is fixed by the priests.

A large field outside Bangkok is the scene of this ceremony. A royal pavilion is provided for the King and Officials of State, with marquees and pavilions for other spectators of rank, whilst the file, consisting largely of farmers and petty land owners, stands or squats at the far end of the field. The plough used looks like that in use in the days of King Tut, is about 10 feet long, with a high handle decorated in scarlet and gold. Four sacred oxen, kept solely for this occasion, with their sleek fawn sides covered with scarlet embroidered silk and with twinkling ornaments suspended from their horns and foreheads, were provided to pull the plough, but only one pair was used.

At the time that we were there, the Royal Seat was occupied by the Regent, the King's uncle, owing to the absence abroad of the King. Punctually at two minutes to 10, the exact minute being fixed by astrology, the Minister of Agriculture left his office and motored to the field. On arrival, accompanied by high Buddhist priests, he disappeared into the enrobing pavilion, where he removed the uniform of silver and gold cloth in which he had appeared, and was dressed in a crimson silk penung.

Reappearing, he prayed before the Royal Seat, and the oxen were yoked to the plough and then, accompanied by a retinue of officials and priests, the Minister commenced to plough, or at least scratch the surface in ever-widening circles. Round and round they went, 50 or 60 times, a priest leading the way, sprinkling water, other priests, bearing ceremonial umbrellas and various symbolic objects, walking beside the plough, followed by lesser officials and priests.

When the surface had been gone over once, four elderly Princesses of the

Royal Blood came out, each bearing, on a carrying pole over her shoulders, two baskets of seed rice. The Minister, priests, and officials then scattered the seed over the area prepared, after which a few more turns were made with the plough, ostensibly to cover it over. This being done, the Minister again kneeled before the Royal dais and apparently made a lengthy prayer, after which the oxen were led up before the Regent and trays of various field products were offered to them. This is a matter of great importance, as the foods that are most appreciated by the oxen forecast which crops will be most successful throughout the year.

The oxen having partaken of their refreshments, the field was thrown open to the agriculturally-interested public, which swarmed in pell-mell to gather up in boxes, baskets, and handkerchiefs, handfuls of the soil and seed which, having been blessed, would bring blessing to their own crops if scattered upon their home fields. Farmers, school children, lesser officials, and even some of the Princesses mingled in a good-natured scramble to gather up some of the lucky soil. Whilst this rush was still in progress, the Royal representative withdrew, escorted by his Guard of Honour, and the Ploughing Season was open.

Book Review

A curious addition to Canadian military history, or, more accurately, to the library of Canadian adventure in the Great War, is the volume *And We Go On*, by Will R. Bird (Hunter-Rose Co., Toronto: $2.00), presenting the author's experiences in France with the 42nd Battalion, Royal Highlanders of Canada, of the 7th Brigade, 3rd Canadian Division. Mr. Bird joined this unit in the autumn of 1916 and served with it, in the ranks, for the remainder of the war.

Gifted with a definite power of description and story-telling, the author writes with passionate sincerity, which would be effective were it not marred by a curious class-consciousness, driving him frequently to bitterness when mention of officers is required. Officers of the 42nd Battalion suffered and died in a proportion almost mathematically the same as that of their men, but Mr. Bird, though willing to pay tribute to the other ranks, acknowledges merit in officers grudgingly and charges demerit with something approaching cruel satisfaction.

With regard to the author's supernatural experiences, wherein his brother, who had previously been killed in action, stands often at his side, and by a touch on the shoulder leads him away from places where death is about to strike, there is not much that a reviewer can say. Mr. Bird states that he thus received warnings time and time again and that, through heeding them, his life was frequently preserved. No one is in a position to question these statements. The frequency of supernatural intervention may seem strange, but Mr. Bird pledges his faith that the incidents occurred as described, which seems to leave the matter not open to further discussion.

As a whole, this book may be said to fill a definite place in the shelf of war literature. It will not, one may assume, be judged among the finest of war autobiographies when the shelf has finally been filled. But it will not be cast aside. Something in the manner of its conception and writing, despite its failings, which are obvious, will earn for it the recognition that is its due.

R.C.F.



McGILL'S FIRST AEROPLANE

This photograph shows the Moth plane presented to the McGill Light Aeroplane Club by the Department of National Defence starting on its first flight. Captain Spooner, the Club instructor, is at the controls, with Mrs. Wilfrid Bovey as his passenger. Note the McGill crest on the fuselage.

The McGill Light Aeroplane Club

SOME four years ago, undergraduates at McGill University formed the McGill Light Aeroplane Club. All were interested in aviation, though not all expected to become pilots. In its first three years the Club obtained instruction from various established schools, and some members secured private and commercial licences. A Glider Club, established two years later, undertook the construction of a modern glider. This Club grew rapidly and became part of the Light Aeroplane Club, which now has Aeroplane and Gliding Sections. Unfortunately, work on the glider has been delayed by the failure of an American firm to deliver essential parts, but the completed sections are, none the less, models of craftsmanship.

In the winter of 1931, negotiations for the acquisition of an aeroplane from the Department of National Defence were successful, thanks to a number of McGill graduates and to the co-operation of the Montreal Light Aeroplane Club, with whom the McGill Club has its home at St. Hubert Airport.

On May 10th, the Club machine, a De Havilland Moth with Gipsy engine, numbered CF-CDA, was presented to the Club by J. A. Wilson, Esq., Comptroller of Civil Aviation, who flew from Ottawa for the purpose, was accepted by Lieut.-Col. Wilfrid Bovey, Honorary President of the Club, and was christened by Mrs. Bovey. After this, despite rough weather, the plane, piloted by the Club instructor, Capt. Spooner, and with Mrs. Bovey as a passenger, took part in a formation flight with two planes of the Montreal Light Aeroplane Club. Thus, for the first time, the scarlet martlets of Old McGill were borne aloft on a plane of their own into the element which, unless all indications fail, will see appreciably more of them in the future.

Reunion PROGRAM

SET BY THE MONTREAL BRANCH EXECUTIVE COUNCIL

» »

WEDNESDAY, OCTOBER 14th

Morning—Registration

Afternoon—Convocation

Evening—Smoker and Entertainment for Men. Special meeting of Alumnae Society, followed by Entertainment for all Women attending the Reunion.

» »

THURSDAY, OCTOBER 15th

All Day—Lectures, clinics, demonstrations and buildings open for visiting graduates.

Afternoon—Opening of New Wing of the Royal Victoria College, and Tea by the Alumnae Society and staff of the R.V.C.

Golf—Certain Montreal Clubs will be open to those who desire to play.

Evening—Dance or Supper Dance at the Mount Royal Hotel.

» »

FRIDAY, OCTOBER 16th

Morning—Annual Meeting, Graduates' Society.

Luncheon—25th anniversary of the opening of the McGill Union—Luncheon to Past Officers of the Union will take place at the Union.

Afternoon—Intercollegiate Track Meet.

Evening—Reunion banquet at the Mount Royal Hotel.

Reunion dinner by Alumnae Society for women graduates only.

Entertainment for women attending the Reunion, by McGill Women's Union.

» »

SATURDAY, OCTOBER 17th

Morning—Open.

Afternoon—Intercollegiate Football at Molson Stadium, Toronto vs McGill.

Evening—Class and Fraternity dinners.

During the

GRADUATES' REUNION

Stay at the



VERNON G. CARDY, *Managing Director*

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Reunion Dance on Thursday

Reunion Banquet on Friday

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THE RODDICK MEMORIAL GATES

These gates, erected as a permanent memorial to the late Sir Thomas Roddick, one of the most distinguished graduates in Medicine of McGill, will witness many of the events in connection with the Graduates' Reunion of 1931. As announced below, the Reunion will take place in the third week of October.

The Graduates' Reunion

SINCE it was announced in the spring that a reunion of McGill graduates would be held in Montreal this autumn, committees have been hard at work, and, as set forth on another page of the *News*, a programme for the days from October 14th to 17th has been announced.

Registration of visiting graduates will take place on the morning of Wednesday, the 14th; the Reunion Convocation of the University will be held in the afternoon, and a Smoker will be given that night.

Lectures and clinics will be given on October 15th, and buildings will be open all day for inspection. A reception will be held on the Campus in the afternoon; and golf will be arranged for those wishing to play. A dance will be held in the evening.

October 16th will be marked in the morning by the Annual Meeting of the Graduates' Society; in the afternoon by the Intercollegiate Track Meet; and in the evening by a McGill Reunion Banquet. A luncheon to past officers of the McGill Union will celebrate the 25th anniversary of the Union's inauguration.

The morning of October 17th is left as an open date; but in the afternoon the Percival Molson Memorial Stadium will be filled to overflowing for the pleasure of witnessing 'Varsity vs. McGill. As usual, after the Toronto football game, class and fraternity dinners will be held, and these will bring the official Reunion Programme to a close. Adequate preparation for the entertainment of all graduates is being made, and the Reunion gives promise of attaining success even more marked than that which attended the famous gatherings of five and ten years ago.

Already the Committee in charge of the Reunion arrangements have heard from a number of far-away graduates who plan to attend the celebrations in October. No estimate of total attendance can yet be made, but it is hoped that all records will be broken, and that McGill may have the privilege of welcoming back a host of her graduate sons. To all of these, however far they may have wandered, the assurance of a warm welcome is unreservedly extended.

McGill University
Montreal

offers courses leading to the following degrees:—

Bachelor of Arts
Bachelor of Science
Bachelor of Commerce
Bachelor of Engineering (*Men only*)
Bachelor of Architecture (*Men only*)
Bachelor of Civil Law
Doctor of Medicine
Bachelor of Library Science
Bachelor of Science in Agriculture
Bachelor of Household Science (*Women only*)
Doctor of Dental Surgery
Bachelor of Music
Master of Arts
Master of Science
Master of Commerce
Master of Engineering
Doctor of Philosophy
Doctor of Civil Law
Doctor of Music

and offers diplomas in courses in:—

Social Work
Graduate Nursing (*Women only*)
Public Health
Household Science (*Women only*)
Music
Physical Education (*Women only*)
Library Work

Books of information giving particulars of these courses may be obtained by applying to the Registrar's Office.

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Trinity College School
PORT HOPE
Founded in 1865

A Church Boarding School. No Day Boys.

The SENIOR SCHOOL is now in its new buildings at Port Hope. They include a Chapel, Dining Hall, Dormitory Buildings, Classrooms, Science Laboratories, Gymnasium, Swimming Bath, and Squash Courts.

The JUNIOR SCHOOL is fully equipped in its new Memorial Building.

A separate Memorial Isolation Hospital.

The Rev. F. Graham Orchard, M.A. (Camb.), D.D.
Head Master

Write to the Bursar:

Trinity College School
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PORT HOPE, ONT.



THE FRENCH SUMMER SCHOOL OF 1930

Under Professor René du Roure and a staff of 25 assistants, McGill University's French Summer School will assemble this month in the Royal Victoria College for the 9th consecutive season. Registration from all over Canada and the United States indicates an attendance of 200, and success equal to that in past years seems assured.

University News and Notes

Sir Arthur Currie Returns

Copies of *The Japan Times & Mail*, recently to hand, describe most interestingly the visit to that country of Sir Arthur and Lady Currie in April. Sir Arthur, who was returning to Canada from his official mission to India, was received in audience by His Majesty the Emperor of Japan, and while in Tokyo, was the guest of the Canadian Minister, the Honourable Herbert Marler. Reaching Canada in mid-April, Sir Arthur paused in Victoria, B.C., to address a banquet of the Canadian Club, then proceeded to Montreal. Notwithstanding the arduous work that is now occupying his time to the full, he has generously agreed to contribute an article on his mission to the Orient to the September number of the *News*.

Royal Society Officers

At the annual meeting of the Royal Society of Canada, held at the University of Toronto in May, Sir Robert Falconer was elected President for the coming year; and F. E. Lloyd, Macdonald Professor of Botany and Director of the Biological Building, McGill University, was elected Vice-President. Newly-elected Presidents of Sections of the Society included Professor A. Norman Shaw, Professor of Physics at McGill, who assumed leadership of the Section of Mathematical, Chemical, and Physical Sciences; and Professor J. B. Collip, Chairman of the University's Department of Biochemistry, who was elected to head the Biological Sciences Section.

Value of Scholarships Increased

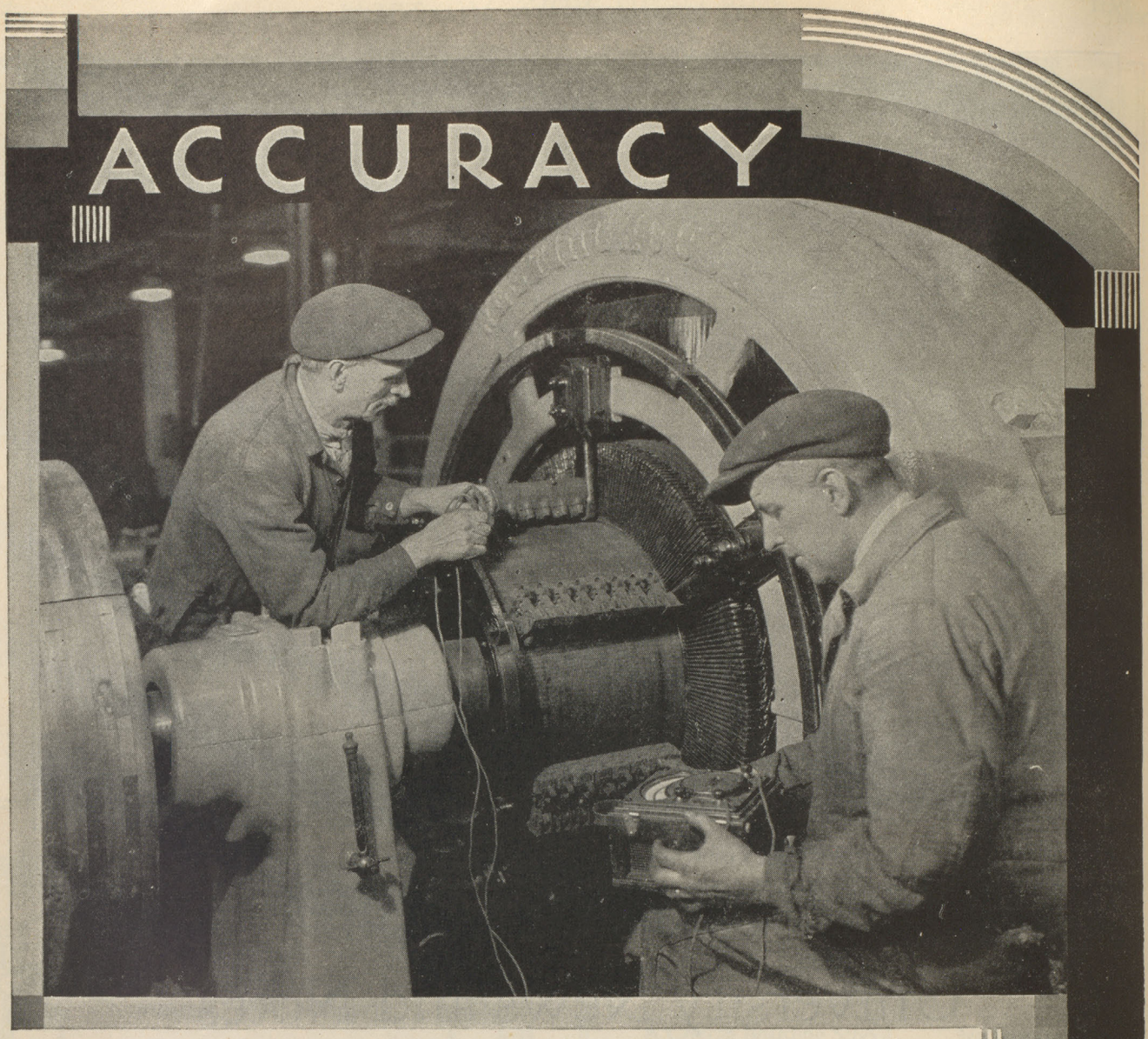
Owing to the fact that fees in the Faculty of Arts and Science were increased last year, the Chancellor of the University, E. W. Beatty, Esq., has increased the value of the two scholarships standing in his name, from $500 to $600 each. The scholarships, each now payable at the rate of $150 a year, are tenable for four years, one by students in honour classics, and the other by students in honour mathematics, or honour mathematics and physics. They are open only to male students, educated in Canadian schools, whose parents are Canadian, or British, born.

Library School Accredited

Officials of the McGill Library School have been notified that the School has been accredited by the Board of Education for Librarianship of the American Library Association. The Library School, founded in 1904, is the only school so accredited in Canada, and the only librarianship training institution in the Dominion granting a librarian's degree.

Japanese Royalty Visit McGill

Among the distinguished visitors to the University this spring were His Imperial Highness, Prince Takamatsu, brother of the Emperor of Japan, and the Princess Takamatsu, who were received by Sir Arthur Currie, Dean Martin, and members of the staff, on April 30th. A ceremonial tea was served in Japanese fashion in the Council Room of the



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Arts Building, and later the royal visitors were welcomed in the Gest Chinese Research Library by Lionel M. Gest, Esq., and by Professor Kiang Kang-hu, Director of the Department of Chinese Studies. Their Imperial Highnesses expressed interest in the Oriental works, to which valuable additions are constantly being made, and congratulated the University on having acquired a unique collection.

Gifts to the General Hospital

At a meeting of the Cabinet in Quebec on April 16th, an order-in-council was passed granting $25,000 a year to the Montreal General Hospital for 20 years. A similar gift had previously been announced from the City of Montreal. Despite hard times, the generosity of the Provincial Government, and that of the City, has been rivalled from private sources, among the more important gifts announced this spring being $50,000 from J. C. Newman, Esq., for the purchase of radium to add to the gift of similar value made last year; $10,000 from W. H. Robert and Miss S. M. Robert, towards a fund for anti-pneumococcic serum and insulin; $5,000 from T. B. Macaulay, Esq., for a new electro-cardiograph machine; and $5,000 from Julian C. Smith, Esq., to purchase new apparatus for the Metabolism Department.

"Old McGill"

Volume 34 of the annual "Old McGill," published by the Junior Year, appeared this spring, and is a production reflecting great credit on those who prepared it for publication. Very modestly, the Editorial Board suggest that their work is far from the perfection they would wish to have attained, at the same time, acknowledging their indebtedness for ideas to the editors and volumes of the past. All this may be true, but Volume 34 reveals striking originality and workmanship of a high order. To G. V. V. Nicholls, Editor-in-Chief, and his associates, the *News* offers sincere congratulations.

Social Events Reported

Among the social events reported since the last issue of the *News* went to press, were the reunion dinner of the R.V.C. class of 1928, held in the University Women's Club, Montreal, on the night of April 11th; the conversazione and dance of the Ottawa Valley Graduates' Society, held in the Dominion Archives, Sussex Street, Ottawa, on April 22nd; a highly successful dinner of the New York Branch of the Graduates' Society, held at the Canadian Club, Hotel Biltmore, on April 24th; the annual dinner and dance of the McGill Society of Toronto, held in the Roof Garden of the Royal York Hotel, Toronto, with approximately 130 guests attending; and a dinner of the Detroit Branch which, with appropriate red menus bearing the martlets of McGill, was held in the Fort Shelby Hotel, on April 8th.

French Minister Visits McGill

On the occasion of his first official visit to Montreal, on May 22nd, His Excellency, Charles A. Henry, French Minister to Canada, visited McGill, where he inspected Moyse Hall, the Redpath Library, and the Gest Chinese Research Library. He remarked that certain of the charms that age alone can bestow were apparent at McGill, which in 110 years had acquired many of the most attractive characteristics of the older academic institutions abroad.

Biologists' Convention

A wealth and variety of scientific papers were presented in mid-April to the Convention of the Federation of American Societies for Experimental Biology, which gathered in Montreal at McGill University and the Mount Royal Hotel. Among the papers presented by members of the University, were a treatise on the restoration of pancreatic secretion by peptone and histamine, compiled by Dr. Margaret E. MacKay and Dr. S. G. Baxter; a discussion on the presence of a soluble mucoprotein in the gastric juice, by Dr. D. R. Webster and Dr. S. A. Komarov; and a digest of observations on "Acid-Base Equilibrium in Relation to Gastric Secretion" by Dr. A. M. Vineberg and Dr. J.S. L. Browne. Professor J. B. Collip reported having discovered a new hormone (emmenin) in the placental secretion, and acknowledged the invaluable assistance of Drs. D. L. Thompson, J. S. L. Browne, M K. McPhail, and J. E. Williams.

Death of Madame Cornu

Old residents of Montreal, and former pupils of the McGill Normal School and Macdonald College, will regret to hear of the death of Madame Edouard Cornu, which occurred at La Tour, near Vevey, Switzerland, on February 3rd. Madame Cornu resigned from her position as instructor in French at Macdonald College in 1912, but remained in Montreal until May. 1929, when, after more than a half-century's absence, she returned to Switzerland. Interment took place in the cemetery at Le Locle, the town where Madame Cornu was born.

The Chancellor Horoured

An added link in the traditional chain of friendship between McGill and the universities of the Old Country was forged in April, by the decision of the Senate of St. Andrew's Universty to confer an honorary LL.D. degree upon E. W. Beatty, Esq., Chancellor of McGill and President of the Canadian Pacific Railway. In both capacities Mr. Beatty commands respect in the British Isles, commensurate with that accorded him in Canada, and the announcement from the Senate of St. Andrew's, in session at Dundee, was received throughout Great Britain and Canada with whole-hearted approval.

News Articles Attract Attention

Among the articles in the March number of the *News*, attracting an appreciable measure of public attention, were Dean C. F. Martin's "Medical Research" and H. R. Dowswell's "The Empire State Building." In substance, Dean Martin's article was reprinted in the Montreal *Gazette* on March 20th, and details of the Empre State Building, selected from those presented by Mr. Dowswell, appeared in the Montreal *Star* on March 28th. With the courtesy that invariably governs their action in such matters, both papers gave the *McGill News* credit as the source of their material, the *Star* adding that the *News* was "maintaining the high standard" to which it had attained.

Death of Professor Lambert

Students in modern languages at McGill, in the period from 1899 to 1926, will learn with regret of the death of Professor Emile T. Lambert, which occurred suddenly in the Westmount Library, on April 21st last. Professor Lambert had been in ill health for a number of years, but news of his death was unexpected, and came as a shock, not only to his old students at McGill, but to many ex-scholars of Crichton, St. John's, and other Montreal schools, who recall with pleasure the extra-University hours that he devoted so ungrudgingly to their French or German instruction.

Economic Studies

Continuing its policy of publishing a series of treatises on the National Problems of Canada, the Department of Econonics and Political Science presented four brochures in 1930, dealing respectively with "The Asbestos Industry in Canada," "The Alberta Coal Problem," "The Negro in Canada," and "Chain Stores in Canada." Copies of these excellent publications may be obtained from the Packet-Times Press, Limited, Orillia, Ontario; through local bookstores; or by subscription (four numbers a year, $2.00); from Professor Stephen Leacock, McGill University, Montreal. When single copies are ordered the price is 75 cents.

Professor Willey's New Book

Professor Arthur Willey, Strathcona Professor of Zoology, is the author of a new book, "Lectures in Darwinism," the publication of which

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was announced in the press in April. Professor Willey, who is a Fellow of the Royal Society, came to McGill in 1909, after varied experience, which included research carried out in the island of Ceylon. Referring to the popular love for arguing on evolution, the Montreal *Star* notes that Professor Willey's latest book emphasizes the futility of attempting to answer the claims of opponents or supporters of the theories of evolution by a categorical yes or no. "There is no possibility of settling such a question without reservation," Professor Willey declares.

A Relic from Easter Island

When a peculiar stone bust was unearthed in Notre Dame de Grace, Montreal, this April, it was thought that a Canadian Indian relic of unique design had been discovered. E. LIONEL JUDAH, Curator of Museums at McGill, however, was shown the bust, and at once stated that it was not of Canadian origin, but had come by some means from Easter Island, in the South Pacific. Later, Mr. Judah was found to be correct when it was established that the bust, weighing approximately thirty pounds, had been brought to Montreal some five years ago by an officer of a British merchant ship who, finding that it occupied too much space in his home, abandoned it in a vacant field only a short time before its re-discovery created such widespread interest.

Sound-Absorbent Perfected

Appreciable interest was aroused early in May when it was announced from the Physics laboratories that success had been achieved in producing a remarkably effective acoustic, or sound-absorbing, board from the waste products of Canadian wood. PROFESSOR H. E. REILLY, Associate Professor of Physics, supervised extensive tests, and the new board fulfils the requirements he laid down when the efforts to produce an effective material were begun. Hitherto acoustic fibre board has been imported into Canada from the United States. Its value in reducing noise received striking demonstration recently when corridors in the Ross Memorial Pavilion of the Royal Victoria Hospital, Montreal, were successfully treated. With the advent of a Canadian product at a substantially lower price, widespread use of the material throughout the Dominion seems probable.

Russia's Five-Year Plan

In addresses delivered respectively to the Electrical Club and the Junior Board of Trade, Montreal, DR. CYRUS MACMILLAN and DR. STEPHEN LEACOCK discussed aspects of the Russian Soviet's Five-Year Plan in the light of history and in that of the most recent developments. Professor MacMillan drew interesting comparisons between the French Revolution and modern Russian Communism; and Professor Leacock stated his unequivocal belief that the Five-Year Plan, with its unequalled despotism and tyranny, would fail and would break up in a sea of blood and fire such as the world had never seen before. Deep interest attached to the two addresses, intensified by the fact that each, through different channels, reached the conclusion that only failure faced the most determined effort to enslave a people in the whole history of our time and generation.

Dr. George Armstrong Honoured

Honorary Fellowship in the Royal College of Surgeons, Ireland, was granted to DR. GEORGE E. ARMSTRONG, Emeritus Professor of Surgery at McGill, at a meeting on April 9th. Dr. Armstrong, who was formerly Chief Surgeon of the Royal Victoria Hospital, Montreal, is an Honorary Fellow of the Royal Academy of Medicine, Ireland, and has held the Presidency of the Canadian Medical Association, the American Surgical Association, and the American College of Surgeons.

McGill's 110th Anniversary

Owing to the absence of the Principal and the approach of the examination season, no ceremony marked the 110th anniversary of the founding of the University, which received its royal charter on March 31, 1821. One hundred and twenty years ago, also in March, JAMES MCGILL made his will, bequeathing to certain persons for transfer to the Royal Institution for the Advancement of Learning, his Burnside property of 46 acres and $50,000 in money for the founding of McGill College. McGill College and the University stand today in tribute to his generosity and in recognition of the untold sacrifice of many who succeeded him.

A Pamphlet in Spanish

Under the title *La Universidad de McGill*, the University distributed at the British Empire Exhibition in Buenos Aires, 1,000 copies of an attractive pamphlet, written in Spanish by LUIS C. GONZALEZ, Sci. '30, and presenting a brief history of McGill, together with an outline of the University's modern accomplishments. The *News* was able to assist in the preparation of this interesting brochure by contributing some of the cuts, which, with Spanish underlines, were used to illustrate scenes in the University's buildings and grounds.

Lecture on Liverpool Cathedral

Liverpool Cathedral, which stands as a monument to the genius of SIR GILES GILBERT SCOTT, and as a vindication of the modern stonecraftsmen of England, was chosen by PHILIP J. TURNER, F.R.I.B.A., Special Lecturer in the School of Architecture, as the subject of an illustrated address delivered to members of the Builders' Exchange, Montreal, in April. Liverpool Cathedral, Professor Turner pointed out, will, when completed, be the fifth largest cathedral in the world and the highest in Christendom. It will accommodate 8,000 worshippers, with 3,000 in the central space, a number greater than any cathedral designer had attempted so to accommodate before. In presenting interesting comparisons, by means of which facts were brought strikingly to his hearers' attention, Professor Turner stated that the Cathedral would be twice as long as Westminster Abbey, and 140 feet longer than the new Sun Life Building, in Dominion Square, with a total area of more than 100,000 square feet.

Relic of a Famous Club

Among the most interesting of the documents brought to light by an "Old Montreal" loan exhibition arranged by the McCord National Museum, a few weeks ago, was a minute book of the famous Beaver Club, which, as the Montreal *Gazette* remarks, "dominated the social, political, and commercial life of Canada for over 40 years." The minute book recently discovered starts in February, 1807, and continues to 1816. Then there is a gap, signifying, probably, that the prestige of the famous club was waning, and the final entry on March 5, 1827. The Club was formed in 1785 by the partners of the Northwest Fur Company, and, throughout its career, membership was highly coveted. As a result of arrangements being effected, it is hoped that the minute book will find permanent sanctuary in a museum at McGill.

The Peterson Coin Collection

A valuable collection, composed of thousands of platinum, gold, and silver coins, collected by the late SIR WILLIAM PETERSON, and by his son, the late LIEUT.-COL. W. G. PETERSON, has reached the University, to which it was bequeathed in Col. Peterson's will. The oldest coin was minted approximately 2,700 years ago; and the most valuable are Russian coins made of platinum. In addition to coins, the gift includes a collection of antique carved gems, collected from many lands over a long period of years. It is hoped that, after classification has been completed, the collection will be placed on view this summer.

Memento of Edith Cavell

Recalling tragic memories and a tale that will live long in the history of the Empire, is a scrap of faded paper, hardly four inches square, acquired recently by the University Library, and bearing the signature of EDITH CAVELL. The document on which the signature appears is a receipt, dated July 19, 1915, a time, doubtless, when Miss Cavell was carrying out the work for England that led to her execution in Brussels, following the sentence of a German court-martial.

(*Continued on Page 59*)

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The Graduates' Society records with deep regret the deaths of the following Alumni:

BANCROFT, CHRISTOPHER DUNKIN, past student, in Montreal, April 29, 1931.

CAMERON, EDWARD PARKE, Sci. '20, in Montreal, May 12, 1931.

FOSTER, HON. GEORGE GREEN, K.C., Law '81, in Westmount, Que., May 1, 1931.

HUGHES, REV. SILAS J., D.D., past student, at Hornitus, Cal., April 26, 1931.

KAHLER, REV. FREDERICK AUGUST, Arts '69, M.A. '72, at Buffalo, N.Y., on January 24, 1931.

McLEOD, NORMAN McL., Sci. '99, in Montreal, February 23, 1931.

McNAB, ARCHIBALD HUBERT, Sci. '25, accidentally, at Palatz, Peru, on November 12, 1930.

MICHELSON, DR. ALBERT ABRAHAM, LL.D. '21, in Chicago, Ill., on May 10, 1931.

MULLOY, DR. PATRICK GANNON, Med. '12, at Brockville, Ont., April 26, 1931.

RICHARDSON, DR. GEORGE CLARKE, Med. '87, in Ottawa, April 16, 1931.

SEMPLE, DR. EDWARD JOHN, Med. '93, in Westmount, Que., April 20, 1931.

SOLANDT, REV. ANDREW PARKER, Arts '87, at Plantsville, Conn., February 26, 1931.

STEWART, DR. JOHN WILLIAM, Med. '12, at Windsor, Ont., April 25, 1931.

SUTHERLAND, DAN McLEOD, Sci. '18, at Kitchener, Ont., on April 29, 1931.

TATLEY, ELEANOR, Arts '92, in Montreal, on May 9, 1931.

THOMAS, DR. HAROLD H. S. WOLFERSTAN, Med. '97, at Manaos, Amazon State, Brazil, on May 8, 1931.

THOMPSON, DR. JOHN, Med. '92, at Duncombe, Iowa, February 20, 1931.

WALKER, WILLIAM SIMPSON, K.C., Law '74, in Montreal, March 27, 1931.

WALSH, DR. WILLIAM EDMUND, Med. '92, at Morris, Ill., on April 28, 1931.

WURTELE, CHARLES JOHN CAMPBELL, Law '63, at Sorel, Que., April 15, 1931.

In the quarter year covered by this issue of the *News*, the Faculty of Medicine has suffered through the deaths of several prominent graduates, the number including Dr. W. E. Walsh, who died in Morris, Ill., a city of which he had formerly been Mayor, on April 28th; Dr. John Thompson, who for thirty-five years had practiced medicine and surgery in Duncombe, Iowa; Dr. Harold Wolferstan Thomas, who had conducted valuable research in sleeping sickness, and whose death occurred at Manaos, Brazil, on May 8th. In addition to these well-known graduates, who died in the United States, or abroad, the medical profession in Canada suffered sharp loss through the deaths of Dr. J. W. Stewart, of the Class of 1912, who died in Windsor, Ontario, in April; Dr. G. C. Richardson, a senior physician, who died in Ottawa a few days earlier; and Dr. P. G. Mulloy, Med. '12, whose death took place in Brockville, Ontario, on April 26th.

In Montreal, also, the period was marked by the death of a well-known physician, Dr. E. J. Semple, who graduated with honours in 1893, subsequently studying abroad, and then, for many years, serving on the staff of the Montreal Western General Hospital, where his work in paediatrics and heart diseases will be long remembered.

To the Faculty of Applied Science, recent months have brought news of the deaths of a number of distinguished graduates, these including Edward Parke Cameron, Director of the Division of Pulp and Paper of the Forest Products Laboratories of Canada; Archibald McNab, who was accidentally killed while employed as an engineer by the Northern Peru Mining and Smelting Company; and Daniel Sutherland, a famous athlete in recent years, who at the time of his death was a partner in the Sutherland and Schultz Electrical Company in Kitchener, Ontario. Another Ontario business man whose death has been announced was Norman McLeod, a well-known contractor in Toronto, who died in the Montreal General Hospital of pneumonia, on February 23rd.

In common with the Faculties of Medicine and Science, the Arts and Law Faculties have learned, with regret, of the deaths of several prominent graduates. From the United States, news was received that, in the past winter, two well-known clergymen, the Reverend A. P. Solandt and the Reverend F. A. Kahler, had passed away, the former on February 26th and the latter just a month and two days earlier. The Arts Faculty was also grieved to hear of the death of Eleanor Tatley, a graduate in 1892, who died in Montreal on May 9th.

Outstanding among the graduates in Law, were the Honourable George Green Foster, K.C., member of the Dominion Senate, and former Batonnier of the Montreal Bar, who died at his home in Westmount on May 1st, and, in the presence of many mourners, was buried at Knowlton, P.Q., three days later; Charles J. C. Wurtele, aged 90, dean of the practising advocates of the Province of Quebec, who died at Sorel, P.Q., on April 15; and W. Simpson Walker, also 90 years of age, former Registrar of the Exchequer Court of Canada, Quebec Admiralty District, who died at his home in Notre Dame de Grace, Montreal, on the night of March 27th. In addition to these most distinguished graduates, the University mourns the deaths of two past students, the Reverend S. J. Hughes, who died in California, on April 26th, and C. D. Bancroft, formerly of the Dominion Civil Service, who died in Montreal on April 29th.

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Personals

The *News* welcomes from graduates personal items for inclusion in these columns. Press clippings or notices should be addressed to H. R. Morgan, Esq., c/o The Recorder Printing Company, Brockville, Ontario, or to the Executive Secretary, Graduates' Society, McGill University, Montreal.

On May 12th, the President of the United States announced the promotion of ROBERT U. PATTERSON, Med. '98, to the rank of Major-General, and to the command of the Medical Corps of the United States Army. The promotion was announced to take effect on May 31st.

At a meeting of the American Institute of Mining and Metallurgical Engineers, held recently, FRANCIS W. MACLENNAN, Sci. '98, Sci. '00 (mining), was presented with the Saunders gold medal for 1931, one of the highest and most coveted of Metallurgical awards. An article on copper mining, which Mr. Saunders most courteously agreed to prepare, appears in this number of the *News*.

LIEUT.-COL. E. P. FETHERSTONHAUGH, M.C., Sci. '99, Dean of the Faculty of Engineering and Architecture of the University of Manitoba, has been nominated by the Hon. the Minister of National Defence to represent Manitoba on the Advisory Board of the Royal Military College of Canada, Kingston.

We are indebted to E. P. MATHESON, Sci. '85, himself a distinguished graduate of McGill, for news of a complimentary dinner tendered to a classmate, DR. H. J. MCDONALD, Med. '85, at the Silver Bow Club, Butte City, Montana, on the night of April 25th. The nature of the event and the greetings extended bore witness to the warm regard in Montana for this well-known graduate of Old McGill.

MISS JOYCE PLUMPTRE, M.S.P.E. '25, has been appointed Physical Director for Women at the University of Western Ontario.

ERIC B. LUSBY, Sci. '26, formerly with the Imperial Oil Co., has been transferred to Talara, Peru, where he is Research Chemist with the International Petroleum Co. Mrs. Lusby (Lillian Norris, B.A. '25) has accompanied her husband to Talara.

CAPT. WILLIAM HERBERT MURPHY, Sci. '11, M.Sc. '15, who has for eight years been in charge, first of the United States Army Signal Corps Aircraft Radio Laboratory, at Dayton, Ohio, and then at Fort Monmouth, N.J., has recently been transferred to the Research and Development Division in the office of the Chief Signal Officer, War Department, Washington, D.C.

THE REVEREND JACOB WHITMAN COX, Arts '76, who recently celebrated his 85th birthday, is now, after more than fifty years of service in the Maritime Provinces, on the retired list of the United Church of Canada and is residing in Brighton, Mass. In a letter accompanying the payment of his Graduates' Society dues, Mr. Cox expresses the pride that it is to him to be a graduate of McGill, and to recall the days of Sir William Dawson's régime, when he received his degree.

DR. JOHN A. MCDONALD, M.D. '05, who for the past 25 years has been a medical missionary for the United Church of Canada, in Kongmoon, South China, is returning to Montreal in July.

JOHN H. BIELER, Arts '13, of the Secretariat of the League of Nations, Geneva, is arriving in Montreal in June, accompanied by Mrs. Bieler.

DR. J. A. L. WADDELL, Sci. '82, of New York, is the first recipient of the Clausen Gold Medal, to be awarded annually in future for services performed by a citizen of the United States in advancing the social or economic welfare of engineers. The medal is awarded by the American Association of Engineers.

E. H. TERRANCE, Sci. '23, is now employed with the Otis-Fensom Elevator Co., Hamilton, Ontario.

W. T. GILMOUR, Arts '25, M.Sc. '26, is now serving on the staff of the Smart-Turner Pump Company, Hamilton, Ontario.

DR. A. J. WALKER, Med. '24, is serving on the staff of the hospital of Venezuela Gulf Oil Company, Maracaibo, Venezuela; and K. W. G. PATTERSON, Sci. '26, is Petroleum Engineer with the Caribbean Corporation in the same location.

DR. HAROLD L. GOKEY, Med. '17, has been elected mayor of the village of Alexandria Bay, N.Y., where he has practised since graduation.

When DR. T. P. FORAN, Law '70, of Hull, Que., on March 14, celebrated the sixtieth anniversary of his admission to the Bar of the Province of Quebec, he was tendered a luncheon by the Batonnier and council of the Hull Bar, attended by Rt. Hon. R. B. Bennett and prominent members of the Bench and Bar of Hull and Ottawa. It was also Dr. Foran's 82nd birthday.

REV. DR. W. M. ROCHESTER, Arts '87, editor of the Presbyterian Record, Toronto, has been elected chairman of the western section of the Alliance of Reformed Churches.

After some years of service as district staff officer of Military District No. 1, London, Ont., Major F. C. HANINGTON, M.C., past student, has been appointed district staff officer at Quebec City.

DR. G. E. JOSEPHS, Med. '81, has been re-elected chairman of the Public Library Board of Pembroke, Ont.

JAMES A. DE LALANNE, Arts '19, has been re-elected convenor of the senior group of the Quebec Amateur Hockey Association.

LT.-COL. HUGH EDWIN MUNROE, O.B.E., Med. '03, of Saskatoon, Sask., has been appointed Lieutenant-Governor of the Province of Saskatchewan, succeeding Hon. H. W. Newlands.

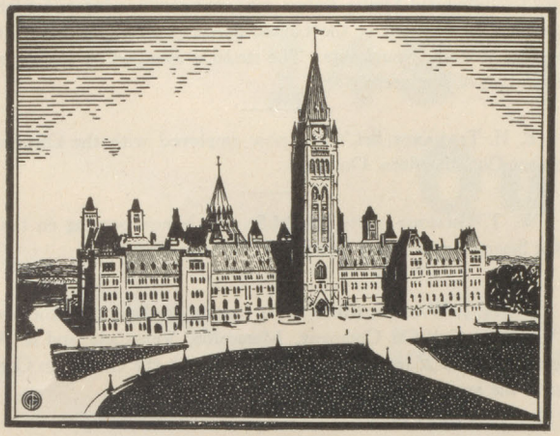
The honorary degree of Doctor of Divinity has been conferred by the Montreal Presbyterian College upon REV. ALLAN S. REID, Arts '02, clerk of the Montreal Presbytery, and a graduate of that institution as well as of McGill.

After three years as rector of St. John's Church, Prescott, Ont., REV. CHARLES PATERSON-SMYTH, Arts '10, has resigned to become rector of Grace Church, Syracuse, N.Y., where he assumed duties on May 15.

AIR-COMMODORE R. H. MULOCK, Sci. '09, of Montreal, is one of the vice-presidents of the Aviation League of Canada for the ensuing year.

HON. NARCISSE PERODEAU, Law '76, on March 26 celebrated his 80th birthday, and was honoured by his colleagues in the Legislative Council at Quebec, who tendered a resolution paying tribute to his valuable public service.

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ORRIN REXFORD, Sci. '90, has completed a connection of 22 years with the evening classes of the Montreal Technical Institute, having served for nine of these years as principal.

A. W. PLIMSOLL, Arts '09, Law '12, of Montreal, was recently created a King's Counsel of the Province of Quebec.

One year ago, DR. A. G. MORPHY, Med. '90, established a resort for nervous patients at Lancaster, Ont., which he has named "Lovat Hall." An estate of 50 acres, laid out by an English gardener half a century ago, and an old manor house situated on the shore of Lake St. Francis, form an ideal setting for this purpose.

One of the oldest living graduates of McGill is DR. GRIFFITH EVANS, Med. '64, upon whom the freedom of the city of Bangor was recently conferred. The British Medical Association reports that Dr. Evans, now in his 96th year, has been a member since 1874. He discovered in India that surra, a disease of horses and cattle, was caused by a trypanosome, to which the name "Trypanosoma evansi" was subsequently given. For his devotion to science, Dr. Evans was awarded the Mary Kingsley medal of the Liverpool School of Tropical Medicine.

The McGill Delta Upsilon memorial scholarship for 1931 has been awarded to DR. WARDE B. ALLAN, Arts '23, Med. '29, who will pursue post graduate studies in Baltimore. Dr. Allan has been an interne at the Montreal General Hospital since graduation.

CHARLES L. BROOKS, Sci. '22, has been elected president of the Young Men's Canadian Club of Montreal.

REV. JOHN L. MCINNIS, Arts '12, has become minister of St. Andrew's United Church, River Heights, Winnipeg, in succession to REV. H. J. KEITH, Arts '99. Mr. McInnes was previously pastor of the Division Street United Church, Owen Sound, Ont.

ARTHUR J. SOPER, Sci. '09, of the Northern Electric Co., has been elected president of the Electrical Club of Montreal.

W. P. HUGHES, Arts '12, Law '18, former coach of the M.A.A.A. team in the Interprovincial Football Union, has been chosen as coach of the Hamilton team for the coming season.

At an ordination service held in Montreal on May 31, REV. NATHAN NOSEWORTHY, Arts '30, and REV. BENJAMIN J. THORPE, Arts '28, were raised to the priesthood of the Church of England by Bishop Farthing.

A Sterling research scholarship at Yale University has been awarded to FRANZ N. D. KURLE, Sci. '27, a candidate for the degree of Ph.D., who will continue his studies in radioactivity, working especially on electronic defraction. A Strathcona fellowship at Yale has been awarded to HOWARD C. REID, Arts '29.

DR. WILLIAM E. COCKFIELD, Arts '13, Sci. '14, of the Canadian Geological Survey, has been elected a Fellow of the Royal Society of Canada.

A. RENDLE STONE, Arts '24, who entered the British Consular Service, after having attended Harvard University, is now British Vice-Consul at Detroit, Mich.

After some years as associate pastor and director of religious education of Central Presbyterian Church, Montclair, N.J., REV. DR. W. F. KELLOWAY, Arts '24, has become pastor of Dominion United Church, Ottawa.

Rev. Errol C. Amaron, Arts '23, has resigned as associate pastor of the American Presbyterian Church, Montreal, to become principal of Stanstead College, Stanstead, Que.

Dr. A. H. MacCordick, Med. '08, of Montreal, has been elected president of the St. James Literary Society of that city.

William F. Angus, Sci. '95, has been elected a director of the Royal Bank of Canada. He is also a director of many important financial and industrial corporations.

A. K. Doull, Comm. '29, has assumed duty as assistant Canadian trade commissioner at Tokyo, Japan.

T. T. Irving, Sci. '98, chief engineer of the Central Region, Canadian National Railways, has been elected a director of the American Railway Engineering Association.

D. G. Dunbar, Sci. '19, is acting Chief Engineer of the Pictou County Power Board, New Glasgow, N.S.

One of the speakers at the Empire Day dinner of the British Empire Association, Chicago, was Robert S. O'Meara, Comm. '21, Canadian Trade Commissioner in that city.

The honorary degree of Doctor of Divinity has been conferred upon Rev. F. Scott McKenzie, Arts '14, principal of the Montreal Presbyterian College, by Knox College, Toronto.

University News and Notes

(*Continued from Page 53*)

Dr. Foster Wins Levy Medal

In April, it was announced by the Physics Department of the University that Dr. J. S. Foster, Professor of Physics, had been awarded the Louis E. Levy gold medal for a paper published in the Journal of the Franklin Institute, Philadelphia. Dr. Foster, who joined the staff of the Physics Department in 1924, has gained recognition for his studies on the construction of gases, and on the effects of magnetic and electric fields on the properties of the atom.

Headmistresses Visit the R.V.C.

As witness to the growing appreciation of a wider knowledge of inter-Imperial educational difficulties and problems, twelve headmistresses of noted English and Scottish girls' schools visited Montreal in April, and were entertained, amongst others, by the Warden and Staff of the Royal Victoria College. The visitors studied the work of the McGill School of Physical Education, that of the Arts students in the R.V.C., and that being carried out in the School of Household Science at Macdonald College, Ste. Anne de Belleuve. They left Montreal expressing admiration for what they had seen, and deep appreciation of the courtesies everywhere afforded them.

Household Science Alumnae

The annual meeting of the McGill University Household Science Graduate Society was held Wednesday, May 20th, 1931.

The following officers were elected for the year 1931-1932: President, Miss Elsie Watt, B.H.S. '24; Vice-President, Miss Jean Kyle, B.H.S. '28; Corresponding Secretary-Treasurer, Miss Florence Newman, B.H.S. '29; Recording Secretary, Mrs. Jean Worden Ellis, B.H.S. '28.

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The McGill Graduates' Lectureship

IN March and April of this year, Prof. W. G. S. Adams, Gladstone Professor of Political Theory and Institutions, Oxford University, visited McGill to inaugurate the McGill Graduates' Lectureship, and delivered a series of addresses on "Aspects of Progress in the Twentieth Century," marked by deep intellectual understanding and distinguished by superb delivery.

Scores of those anxious to hear the opening address were unable to do so on March 12th, when Moyse Hall was filled to overflowing. Those fortunate enough to find accommodation heard a powerful speech, in which Prof. Adams forcefully presented the key-note of the series, namely, his conviction that, in spite of many apparent evidences to the contrary, the world was making progress and gaining ground each year in the realms of political, social and economic endeavour.

Continuing the series a few days later, Prof. Adams sketched the growth of internationalism, which he described as a striking feature of twentieth century progress, illustrating his point by reference to the League of Nations and the ever-increasing desire of the nations of the world to avoid war by means of arbitration.

Comparing the structures of the League of Nations and the British Empire in his third lecture, Professor Adams proceeded in the fourth to trace through the ages the development of the democratic ideal, following this with a masterly exposition of the manner in which nationalism and internationalism, far from being incompatible, are often highly complementary.

Leading from the premises in these lectures, Prof. Adams traced in succeeding addresses the development of democratic parliamentary government and the growth of government participation in the social welfare of the people, concluding the series on April 7th, with a strong plea for community development and adult education, as a means of increasing the ability of the people to understand the problems of the state and, through understanding, to make possible more reasoned assistance.

At the conclusion of this final address, Dean C. F. Martin extended to Prof. Adams the warm thanks of McGill and the Graduates' Society. All who heard the addresses, or met the lecturer during his Canadian visit, concurred in the Dean's words of appreciation, and agreed that the McGill Graduates' Lectureship had enjoyed a distinguished inauguration.

Alumnæ Annual Report

AN active and successful year was reported at the Annual Meeting of the Alumnae Society, held this season in two sessions, the second followed by the annual reception in honour of the graduating class. Mrs. George McDonald presided until towards the close of the second session, when Miss Zerada Slack, newly-elected President, assumed office.

The Society made a determined effort in the past season to increase its usefulness and to widen the range of its interests among its members. Following an open meeting for discussion and the circulation of a questionnaire, several groups were organized for specialized studies and activities, and these have fully justified themselves and prepared the way for futher development.

The report of the Recording Secretary, Miss Evelyn C. E. Wilson, suggested further enlargement of the Society's programme by the establishment of standing committees to concern themselves with such subjects as: the interests of the Canadian and International Federation of University Women; the establishment of endowments; educational interests, including such topics as "Women on School Boards," "Salaries of Teachers," etc.; social service; the interests of undergraduates; buildings, improvements, etc.; membership; record and publicity.

This report mentioned appreciatively that the library established by the Alumnae at the Royal Victoria Hospital has become a department of that institution, with Miss Inez Baylis as its official head. This is in fulfilment of the terms of the original offer of the library to the Hospital in 1920.

The reception held by the Society in honour of Miss Carrie Derick, Emeritus Professor of Evolution and Genetics, was mentioned as an event of special interest. On this occasion Miss Derick was presented by her fellow-graduates with a life membership in the University Women's Club of Montreal.

The Treasurer, Miss Virginia Cameron, reported receipts for the year of $1,744.78, with a balance of $393.79 on hand. The sum of $270.69 was the nett proceeds of the Alumnae Bridges, held under the convenorship of Miss Louisa Fair.

Annual grants were voted to the Canadian Federation of University Women Scholarship Fund and Employment Bureau, University Settlement, and Library Committee.

The report of the Library Committee stated



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that 8,314 books had been distributed in the Military Hospital at Ste. Anne de Bellevue, and 24,671 in the Royal Victoria Hospital.

Miss Mabel King and Mrs. Allan Bone were presented with first and second prizes respectively in the Literary Competition held by the Society this year.

Officers for the coming year were elected as follows: President, Miss Zerada Slack; Vice-Presidents, Mrs. George C. McDonald, Miss Evelyn Wilson, Mrs. Harry Costigan, Miss Mabel Corner; Recording Secretary, Mrs. Michael Tucker; Assistant Recording Secretary, Mrs. Allan Bone; Corresponding Secretary, Miss Ruth Harrison; Assistant Corresponding Secretary, Mrs. Victor LeDain; Treasurer, Mrs. F. G. Charters; Assistant Treasurer, Mrs. Arthur Phelan.

Representatives of the Local Council of Women, Mrs. Walter Simpson and Miss Winifred Hibbard; on the University Settlement Board, Miss Louise Shaw; Ste. Anne's Military Hospital Library Committee, Miss Inez Baylis, convenor; Miss Ruth Murray; Alumnae News Board, Miss M. T. Young, convenor; Mrs. Walter Vaughan, Miss Madeleine Girvan, and Miss Marian Ross.

Alumnæ Hospitality

Women graduates in Montreal, who would be willing to entertain visiting women graduates during the Reunion in October, will greatly facilitate the work of the Reunion Committee if they will communicate with Mrs. V. Le Dain, 922 Hartland Ave., Outrement, Phone ATlantic 3164.

The Alumnae Society will endeavour to extend hospitability to non-resident graduates if they will notify Mrs. Le Dain before September 1st.

Graduates' Reunion

October, 14-17

Remember the Dates!

Nominations, 1931

For Graduates' Society Representative on the Board of Governors: Term—3 years:

G. S. Currie, B.A. '11

For Second Vice-President of the Graduates' Society: Term—2 years:

G. Gordon Gale, B.Sc. '03, M.Sc. '05
T. T. Irving, B.Sc. '98

For Honorary Secretary of the Graduates' Society: Term—2 years:

A. D. McCall, B.Sc. '24
L. H. McKim, M.D. '12

For Honorary Treasurer of the Graduates' Society: Term—2 years:

A. N. Jenks, D.D.S. '20
Walter A. Merrill, B.C.L. '11

For Members of the Executive Committee, two to be chosen by ballot of the members of the Graduates' Society: Term—2 years:

Miss Jane D. Spier, B.A. '21, M.Sc. '22
J. deG. Beaubien, B.Sc. '06
L. C. Montgomery, M.D. '20
M. F. MacNaughton, B.Sc. '22
David Cowan, B.A. '23
M. H. W. Mackenzie, B. Com. '28

For Member of the Council of the Graduates' Society, five to be chosen by ballot of the Members of the Graduates' Society, Term—2 years:

Mrs. G. C. McDonald, B.A. '05
Miss Margaret F. Hadrill, B.A. '04, M.A. '05
Miss Elizabeth Abbott, B.A. '19
R. F. Stockwell, B.A. '08, B.C.L. '11
R. V. Slavin, B.Sc. '10
Percy D. Wilson, B.A. '10
R. A. H. MacKean, M.D. '24
D. R. Logan, B.A. '26
Dan Anderson, B.Sc. '23
G. B. Puddicombe, B.A. '23, B.C.L. '26
D. C. Abbott, B.C.L. '21
T. C. McConkey, B.Sc. '06
Basil L. Nares, B.Sc. '11.

Representative Fellows, one each to be elected by the Graduates at large: Term—3 years:

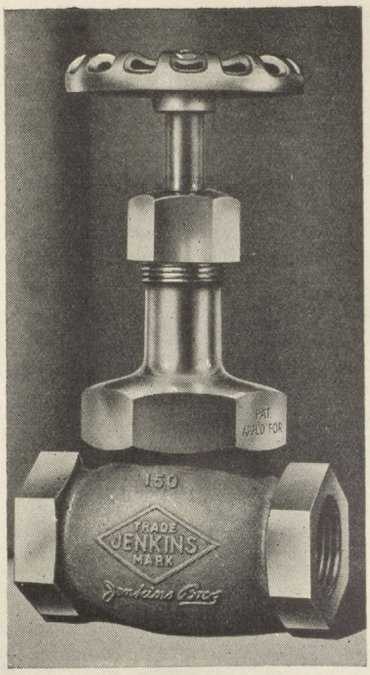
IN ARTS: R. K. Naylor, B.A. '06; Shirley G. Dixon, B.A. '11, B.C.L. '14.

IN MEDICINE: D. Grant Campbell, B.A. '04, M.D. '08; H. C. Burgess, M.D. '05.

IN LAW: B. Brooke Claxton, B.C.L. '21; Norval Dickson, B.A. '01, B.C.L. '04.

IN AGRICULTURE: E. A. Lods, B.S.A. '12, M.S.A. '25; S. R. N. Hodgins, B.S.A. '20, B.A. '27, M.A. '29; E. A. MacMahon, B.S.A. '18.

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Births

ANTLIFF—In Montreal, on March 6, to J. C. Antliff, Sci. '23, and Mrs. Antliff, a daughter.

BALLANTYNE—In Montreal, on March 19, to C. T. Ballantyne, Arts '23, and Mrs. Ballantyne, a son.

BLAIR—At North Gower, Ont., on April 28, to Dr. H. G. F. Blair, Med. '02, and Mrs. Blair, a son.

BOSTOCK—In Ottawa, on May 7, to Hugh S. Bostock, Sci. '24, and Mrs. Bostock, a son.

BRADLEY—In Toronto, on April 20, to H. E. Bradley, Sci. '20, and Mrs. Bradley, a son (Robert Ellison).

CHISHOLM—In Montreal, on April 9, to Dr. Gavin W. Chisholm, Med. '26, and Mrs. Chisholm, a son.

CONSIGLIO—In Montreal, on March 5, to Franco Consiglio, Arch. '25, and Mrs. Consiglio, a son.

CONGLETON—At Minstead Lodge, Lyndhurst, Hants, England, on May 6, to Lord Congleton, Sci. '21, and the Lady Congleton, a son.

COULSON—In Port Arthur, Ont., on March 18, to Dr. R. B. Coulson, Med. '20, and Mrs. Coulson, a son.

CREWSON—At Cornwall, Ont., on March 2, to Dr. A. L. Crewson, Med. '23, and Mrs. Crewson, a son (Roland Errol).

DORRANCE—In Montreal, on February 28, to Dr. F. S. Dorrance, Med. '24, and Mrs. Dorrance, Farnham, Que., a daughter.

DOUGLAS—In New York City, on February 17, to Percy L. Douglas, Sci. '24, and Mrs. Douglas, a daughter.

EIN—In Newark, N.J., on April 20, to Dr. William B. Ein, Med. '23, and Mrs. Ein, a daughter.

ELLIOT—At Ootacamund, South India, on April 17, to Dr. Howard L. Elliot, Med. '29, and Mrs. Elliot, of Bethesda Hospital, Canadian Baptist Mission, Pithapuram, a son.

FINDLAY—In Montreal, on April 14th, to Robert E. Findlay, Sci. '27, and Mrs. Findlay (Jean S. MacLeay, Arts '25), a daughter.

FITZGERALD—In Montreal, on April 18, to Dr. R. R. Fitzgerald, Arts '19, Med. '22, and Mrs. Fitzgerald, a daughter.

HODGSON—In Montreal, on May 7, to Duncan M. Hodgson, past student, and Mrs. Hodgson, a daughter.

KENT—In Montreal, on March 3, to Dr. Leonard Kent, Dent. '23, and Mrs. Kent, a son.

KOCH—In Montreal, on February 13, to E. C. Koch, Sci. '11, and Mrs. Koch, a son.

MACAULAY—In Montreal, on April 19, to Dr. A. F. Macaulay, Med. '26, and Mrs. Macaulay, of Ottawa, a daughter.

MACDERMOT—In Montreal, on April 8, to T. W. L. MacDermot, Arts, '17, and Mrs. MacDermot, a daughter.

MACKAY—In Montreal, on March 27, to Dr. Agret A. Mackay, Med. '13, and Mrs. Mackay, a son.

MACLENNAN—In Montreal, on April 10, to Malcolm Maclennan, Law '29, and Mrs. Maclennan, a daughter.

MACTAVISH—In Montreal, on March 2nd, to Mr. and Mrs. K. L. MacTavish (Marjorie Pennington, Arts '24), a son.

MOTHERSILL—In Ottawa, on March 24, to Dr. G. S. Mothersill, Med. '02, and Mrs. Mothersill, a son.

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REDDY—In Montreal, on March 17, to E. B. F. Reddy, past student, and Mrs. Reddy, a daughter.

REFORD—In Montreal, on May 6, to L. Eric Reford, Arts '21, and Mrs. Reford, a daughter.

REID—In Montreal, on April 28, to R. J. M. Reid, Agr. '18, and Mrs. Reid, Hemmingford, Que., a daughter.

ROBERTSON—In Montreal, on April 3, to Randal K. Robertson, Sci. '14, and Mrs. Robertson, a daughter.

RUBENSTEIN—In Montreal, on April 22, to Mortimer R. Rubenstein, Law '21, and Mrs. Rubenstein, a son.

RYDER—At Windsor, Ont., on February 25, 1931, to F. J. Ryder, Sci. '29, and Mrs. Ryder, a son.

SIMPSON—In Montreal, on February 15, to Dr. R. Geoffrey Simpson, Arts '24, Dent. '28, and Mrs. Simpson, a son.

SKELLEY—At Ste. Anne de Beaupre, Que., on April 11, to Dr. A. J. Skelly, Med. '24, and Mrs. Skelley, of Beaupre, a daughter.

SMART—At Lachine, Que., on March 2, to Allan C. D. Smart and Mrs. Smart (Doris E. Lewis, Arts '20), a son.

SPRATT—In Regina, Sask., on February 13, 1931, to Maynard J. Spratt, Sci. '22, and Mrs. Spratt, a son.

STEWART—In Montreal, on February 27, to Dr. C. J. Stewart, Arts '15, Med. '18, and Mrs. Stewart, a son.

STREAN—In Montreal, on February 9, to Dr. George J. Strean, Arts '18, Med. '21, and Mrs. Strean, a daughter.

THOMPSON—In Montreal, on April 11, to T. C. Thompson, Sci. '19, and Mrs. Thompson, a daughter.

THURBER—At Tiahualilo, Mexico, on April 2, to Dr. D. S. Thurber, Med. '25, and Mrs. Thurber, a daughter.

WILSON—In Belleville, Ont., in April, 1931, to William B. Wilson, Sci. '13, and Mrs. Wilson, a daughter.

Marriages

ASHTON—In Montreal, in April, Miss Elizabeth Maynard Rogers, of Ottawa, and William Elmo Ashton, Agr. '20, of Brampton. Ont.

BABY—In Montreal, on April 21, Miss Audrey Anderson and Dr. Henri Baby, Med. '17, of Montreal.

BIELER—At L'Eglise de Chene-Bougeries, near Geneva, Switzerland, on February 14, 1931, Mlle. Raymonde de Candolle and John H. Bieler, Arts '13.

BROWN—At Montreal, June 5th, Miss Gale Brown, Arts '30, and Dr. John Archibald McLennon, of Windsor, Ont.

BURKE—In Montreal, on February 14, Miss Hazel Mussen Rexford, daughter of Rev. E. I. Rexford, Arts '76, and Mrs. Rexford, and Dr. Hugh Edmund Burke, Med. '23, of Ray Brook, N.Y.

EAKIN—In Montreal, on April 11, Miss Frances Isobel Newman and Dr. William Wilson Eakin, Med. '21, of Montreal.

HANLON—In Montreal, on May 29, Miss Elizabeth Mudge and Dr. Francis Woodward Hanlon, Med. '31, of Montreal.

HEENEY—At Arnprior, Ont., on April 18, Miss Margaret Lois Reid and Carden Thomas Heeney, Sci. '26, of Ottawa.

HEENEY-YUILE—At Montreal, Miss Peggy Yuile, past student, and Arnold Heeney, Law '29.

HEMMING—In London, England, on March 5, Miss Alice Louisa Weaver, Vancouver, B.C., and Major Henry Harold Hemming, M.C., Arts '14, of London, son of H. K. S. Hemming, Arts '80, of Montreal.

HUMPHREYS—In Ottawa, on August 1, 1930, Miss Ethel Lawrence and Dr. John Charles Humphreys, Med '21.

IRVINE—On March 3, in Montreal, Margaret Mona, daughter of Hon. A. R. McMaster, Arts '97, Law '01, and Mrs. McMaster, and Arthur Marshall Irvine, Jr., Sci. '29, of Shawinigan Falls, Que.

LEGATE-MATTHEWS—At Montreal, Marjorie Matthews, Arts '27, and David M. de C. Legate, Arts '26.

MAGOR—In Montreal, on April 29, Miss Mary Elizabeth Hood Beard and Philip Douglas Magor, Sci. '28, of Montreal.

MORISON—In Vancouver, B.C., in February, Miss Lillian Mary Brissenden and Charles Keith Morison, Arts '13.

PATTERSON—On January 26th, in Maracaibo, Venezuela, Miss G. Coldwells and K. W. G. Patterson, Sci. '26.

POWELL—In Ottawa, on November 11, 1930, Miss Elizabeth Alice Smith and Allan T. Powell, Sci. '23, M.Sc. '25, of Brownsburg.

ROSS—At Montego Bay, Jamaica, on March 31, Miss Iris Delisser and Commander John Kenneth Levison Ross, Sci. '97, of Montreal.

RUTHERFORD—In Montreal, on March 26, Miss Margaret St. Claire Clouston and Andrew Scott Rutherford, Sci. '22, of Montreal.

SIMPSON—At Montreal, Virginia Simpson, Arts '30, and Ned Wood, of Chicago.

SWABEY-SMART—In Montreal, on February 14, Miss Helen Louise Smart, Arts '33, of Ottawa, and Alan Swabey, Comm. '30, of Montreal.

THOMPSON—In Montreal, on April 15, Miss Margaret Logan Smallpiece and William Brown Thompson, Arts '28, of Montreal.

WOOD-BELL—At Lima, Peru, in June, Miss Helen Bell, Arts '30, and Stewart Wood, Com. '30.

ZADRA—In Montreal, on April 6, Miss Ada Catelli and Dr. M. Zadra, Med. '29, of Pentecost, Que.

Alumnæ Notes

MISS HURLBATT, who spent the winter in Charleston, S.C., has gone to Old Lyme, Conn., but expects to return to Montreal in a few weeks.

1912—VERA L. BROWN, M.A. (Ph.D., Bryn Mawr, 1922), has been promoted full Professor of History, at Smith College, North Hampton, Mass. She has been granted a sabbatical absence for the present year.

1916—MABEL E. CORNER is spending the summer abroad.

1920—M. DOROTHY MAWDSLEY is teaching this season in the Summer School at the University of British Columbia.

1925—DOROTHY A. HENEKER (Law), has returned to Montreal after a tour of seven European countries in connection with the organization of Business and Professional Women's Clubs.

1929—IDA GREAVES, M.A. '30, Barbados, B.W.I., who has been taking post-graduate work at Harvard, is continuing her studies at Bryn Mawr next year.

AGNES MORTON, who has been in Paris for two years, is returning to continue work at McGill next session.

ELIZABETH STEAD has taken a position in the Redpath Library, McGill University.

1930—ALICE PROWSE has returned from her studies in Paris, and has accepted a position in the Sun Life Assurance Company.

ISOBEL ROWAT has returned from Paris to continue work at McGill.

1931—AGNES MOFFAT, Med. '31, is taking her interneship at the Toronto General Hospital.

Lost Addresses

The present addresses of the following alumnae are missing. Anyone knowing them is requested to send the information to the Secretary, Royal Victoria College, or to the Executive Secretary, Graduates' Society, McGill University.

ETHEL GRAY—1916.
MRS. JACK C. IZOD (Laura A. Munn)—1905.
MRS. F. R. L. LAZIER (Rebecca A. Contant)—1921.
MRS. R. L. ORR (Marion MacKinnon)—1910.
MRS. B. E. PORRITT (Jean T. Willett)—1911.

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Thomas R. Ker, K.C. — Wilbert H. Howard, K.C.
Linton H. Ballantyne — Lionel A. Forsyth, K.C.
Colville Sinclair, K.C. — Eldridge Cate
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BURKE, T. VINCENT
ELLIN, MITCHELL I.
FREDERICK, WILFRED D.
HOLLAND, J. ALLISON
JONES, G. FORD
MACMAHON, HUGH B.
RICHTER, WILLIAM H.
SHEA, WILLIAM M.
SHECTER, MAX M.
STEINE, MITCHELL
WALLACE, N. H.
WILSON, DONALD G.
WINDATT, R. D.
1923—BRANCHLEY, CHAS. R.
BROWN, JAMES C.
CURRIE, GEO. R.
DUNCAN, STUART M.
FRANKLIN, SAMUEL
FRIEDMAN, WILLIAM
LAIDLAW, GORDON L.
MAGID, JACOB LOUIS
MORRIS, ROYDEN McD.
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NEGRU, MYER NOEL
RABINOVITCH, R. R.
SCOTT, ROBERT K.
SEGAL, MENDEL
STEPHEN, LLOYD EMERSON
WIGHTMAN, LYALL McGREGOR
WILSON, CLIFFORD P.
1924—ARMITAGE, CLIFFORD D.
AZEFF, HENRY
KEARNS, GERALD VINCENT
SPENCE-THOMAS, WILLIAM J.
1925—CALDWELL, GUY T.
HEILIG, HAROLD ISAAC
KENRICK, NORMAN E.
MILLINGTON, FRANK
SILVERMAN, DAVID
SOMERVILLE, CECIL G.
THOMAS, WILLIAM JOHN
1926—WITMER, EARL ROBERT W.

1927—Ellison, Hilda
Hausner, Isidore David
Harkness, Andrew Ross
LeBaron, Francis Gordon
Stephenson, Leslie

1928—Dwyer, Charles Edward
Kivenko, Nathan Manuel
Morrell, Donald Leonard
Seymour, James Wm.

1929—Hughes, Henry Gordon
Wise, Peter S.

1930—Boyce, Harry Mackenzie
Strain, William John

Medicine

1917—Bernard, S. D.
Derrick, Frederick Douglas
Hall, R. S.
Oberg, A. T.
Park, A. G.
Pengelley, C. E.
Rogers, E. E.
Sasksner, M. H.
Thornton, L. H.
Warshawsky, H. L.

Puzzle

THE following puzzle, credited as to its origin to a number of august examining bodies, has circulated freely on the Campus this spring and has evidently travelled far, as the *News* received a copy of it from a graduate of the University, living in Winnipeg. We gladly accept the suggestion to print it, as we agree that the solving of it affords a few minutes' amusing diversion:

A railway train was manned by a crew of three men, whose names were Smith, Jones and Robinson; and who were conductor, brakesman, and engineer, but not respectively.

On the train were three passengers, Mr. S., Mr. J. and Mr. R.

Mr. R. lived in Ottawa. The conductor lived half way between Ottawa and Montreal.

Mr. Jones earned $2,500.

The conductor's nearest neighbour, a passenger, earned exactly three times as much as the conductor.

The conductor's namesake lived in Montreal.

Smith beats the brakesman at billiards.

What was the engineer's name?

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1878

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1885

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1886

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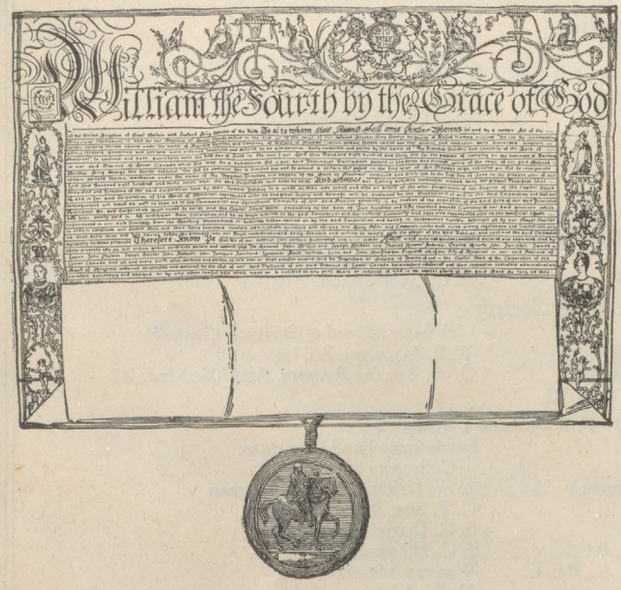
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THE RODDICK GATES AT NIGHT

This striking photograph, presented through the courtesy of the Director of the Department of Extra-Mural Relations, is the work of Mr. Singsung S. Kwauk, a Chinese student in the Faculty of Medicine. Looking through the pillars of the gates, Strathcona Hall and Sherbrooke Street appear, brilliantly lighted by the modernized lamps installed a year ago.

The Position of McGill To-day

A Report Presented to the Board of Governors on August 3rd, 1931

By SIR ARTHUR CURRIE

ON the occasion of the Annual Meeting of the Board of Governors of McGill University, held in the office of the Chancellor on August 3rd, 1931, the Principal and Vice-Chancellor addressed his fellow Governors as follows:

"I desire to make a few comments on the Financial Statement presented.

In any consideration of the financial affairs of McGill University several things must be kept in mind:

(a) The last campaign for funds took place in 1920, or eleven years ago.

(b) Despite the fine success of that campaign, every dollar of the $6,200,000 subscribed and paid was earmarked before a dollar was collected, the Board having pledged itself to erect certain buildings, to raise salaries generally and to establish certain new departments.

(c) So great have been the needs for which the campaign funds could not provide that, despite the vigilance of the Finance Committee, and although we have a larger enrolment of students and have increased the fees, there have been almost yearly overdrafts or deficits and consequent impairment of capital.

On the occasion of the Annual Meeting last year, the Governors sanctioned a deficit of $364,000, which in December was revised to $357,000. As a matter of fact, the actual deficit was not more than $338,000, so that a saving of $19,000 more than anticipated was effected. This was only possible by the exercise of the closest supervision and the most rigid economy, and, possibly, at the loss of some efficiency.



DEAN E. BROWN, M.Sc., M.Eng.

whose appointment as Dean of the Faculty of Engineering, in succession to the late Dean H. M. MacKay, was announced by the Board of Governors in August.

In an examination of a budget, one must review the activities of between 150 and 200 different departments, and I assure you that the Bursar, the Comptroller and myself go over these most thoroughly and carefully, and usually in consultation with the head of the main department concerned. If we are to maintain even the present degree of efficiency, I cannot see where the budget can be cut, unless we eliminate some departments, and I shall refer to this matter later. During the past winter every department in the University surveyed itself, and, as a result, instead of a further pruning of the budget, additional appropriations are found necessary. These surveys were most exhaustive, and they appear to me to have been most intelligently carried out. I have studied them carefully, and after further editing they will be published for the information of all concerned.

These constantly recurring deficits are the cause of great concern; in fact, they are most depressing. It is not a happy condition when one has to refuse, and continue to refuse, legitimate applications for financial assistance to enable proper development to take place. The University has made very pronounced progress during the last ten years, but only because the Board of Governors sanctioned these deficits. We have paid our way and are not in debt, but our capital has been impaired. Each year we have been forced to sell securities to pay these deficits, and, of course, that has meant that each year there has been a lowering of our income earning power. Everyone would be glad if things were so that we could look forward to paying our way by using our income only, but I am afraid that happy condition will not arise for many years in the history of this University if we are to continue to rank in the first flight of universities, and to play the part a university should play.

This year we are lopping off another $17,000 from our expenditure, but let me say that this means a loss of efficiency, and not the elimination of waste. It is possible to do this because we are cutting down the appropriation for upkeep of grounds, for academic and library supplies and equipment, and because some teachers who have resigned are replaced by others to whom we are paying a lower salary. In universities, as in business, the low-salaried man is usually the less qualified man.

There is, of course, another way in which the expenditures might be lowered, and that would be by a general cut in salaries. I cannot support that suggestion, because, on the whole, university salaries at McGill are low, generally lower than at the University of Toronto, at the University of Montreal and at the American universities. We find it difficult to keep our best men as it is; they are being constantly tempted to go elsewhere by the offer of higher salaries. I know of no university in Canada which is reducing salaries on account of the depression. If we did such a thing now the University would lose in its capacity to do the work for which it was founded.

As the statement outlines, we anticipate a decrease in income next year of $85,000. In that we are helpless. There is a loss of the earning power of last year's deficit of $338,000; there is a loss on income through defaults in interest on bond issues and through reductions in dividends; and we anticipate a loss in fees, solely because of the depression. In this we may be agreeably disappointed.

Although the total appropriations recommended are $17,000 less than last year, there is an increase in the appropriation recommended for salaries. Of this, $6,600 is unavoidable, because it represents 12 months' salary to those to whom we were only obliged to give 9 months' last year, because they were engaged as from the first of September.

Owing to the death of Dean MacKay, in the Faculty of Engineering, certain professors were given more responsibility, and I found it necessary to raise salaries in the Department by $2,550, spread over 8 men—not a very large increase. Certain other increases in salaries have been granted and, although these were not asked for by the professors concerned, I hold them to be only fair. I may say here that all Departments have generously co-operated with the administration in having kept down requests for financial assistance to the lowest possible minimum. I do not believe in giving increases in salaries only when asked for, or only in order to retain the services of men offered positions elsewhere. I believe we should reward merit and efficiency to the extent of our ability to do so.

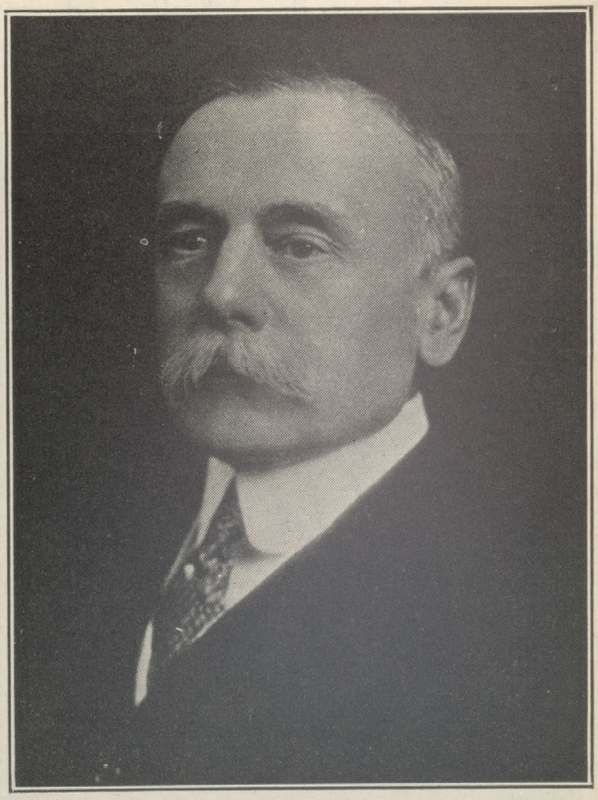
I have found it necessary to recommend the following new appointments:

Dr. J. S. Phillips in Chemical Engineering. Owing to certain economies, this does not make the total appropriation for the Department of Chemistry larger than it was some years ago, but it does provide for instruction in a most important phase of that subject.

I also recommend the appointment of Mr. Gordon Paul as lecturer in Mathematics. This is necessary because Mr. Matthews, the present Registrar, who, since his appointment, continued to give one course in Mathematics, has, on account of his onerous duties, been obliged to relinquish altogether his teaching. Furthermore, Mathematics is a subject of such fundamental importance that we believe in keeping the Department strong. It has been strengthened by the addition of Mr. Paul.

Here seems an appropriate place to make reference to savings effected in the Light, Heat and Power, and Maintenance Departments. During the last two years, the Governors approved certain expenditures for improving the light, heat and power system on the understanding that, as a result thereof, savings would be effected and would be more than sufficient to pay interest on the capital outlay and depreciation on the equipment purchased therewith. These expenditures amounted altogether to $87,000. It is gratifying to report that, after making every allowance for interest on the money invested and a generous allowance for depreciation, there is an annual reduction in gross operating costs of nearly $12,000, so that the money invested is returning large dividends in the form of annual savings. This is one item on the bright side of the picture—for there is a bright side, showing in the greater efficiency of all University Departments as compared with ten years ago, and in the great expansion and development which has taken place. With this I shall presently deal, but first let me point out that in any consideration of our policy there are several things which are inevitable, and of which we must never lose sight.

1. We are a private institution and have been such for over a hundred years; that is, our institution has been maintained largely by private beneficence, although we acknowledge with gratitude such help as we have received from the Government of the Province of Quebec and from the City of Montreal. It may be of interest to you to know that in the ten years preceding June 30th, 1931, Macdonald College, which comprises the School of Agriculture, the School of Household Science and the School for Teachers, has received from the Provincial Government $401,765, and in gifts, scholarships, bursaries and prizes from other sources, nearly $22,000. In that time McGill University received from the City of Montreal $100,000, and from the



BRIGADIER-GENERAL H. S. BIRKETT, C.B., M.D., LL.D.

Former Dean of the Faculty of Medicine and original Commanding Officer of No. 3 Canadian General Hospital (McGill), B.E.F., whose resignation as Professor of Oto-Laryngology, and whose appointment as Emeritus Professor of the same subject, was recently announced by the Board of Governors.

Provincial Government $343,800, while the Dominion Government contributes $1,900 a year to the upkeep of our Observatory.

I think I can safely say that with few exceptions the really great universities of the world have always been private and independent institutions, and that institutions, free from government influence and control have a more truly scientific spirit, one that is less utilitarian in its aims and purposes. Universities wholly, or largely, supported by governments, in order to satisfy the voter who is taxed to support them, have not the same freedom in selecting the student body, and in scientific work are prone to press for material results. This in the long run is deadening to scientific effort.

Pasteur, I suppose, was one of the greatest scientists. The practical results of Pasteur's work must run into untold millions, yet Pasteur would never accept a position in the gift of the French Government. The beer industry was threatened because the beer would not keep; Pasteur solved the problem and returned to his laboratory. The silk industry was on the verge of extinction; Pasteur again found the difficulty and again returned to his laboratory. It has ever been so.



IRA ALLAN MacKAY, M.A., LL.B., Ph.D., LL.D.
Dean of the Faculty of Arts and Science.

The true scientist does his best work when left alone and provided with proper facilities. He requires no pressure or extraneous stimulus.

Because we are a private institution we *are* independent. In all sorts of ways we can pursue our course, unswayed by those influences that count for nothing in the development of true university work, yet hamper the government-supported institution at every turn.

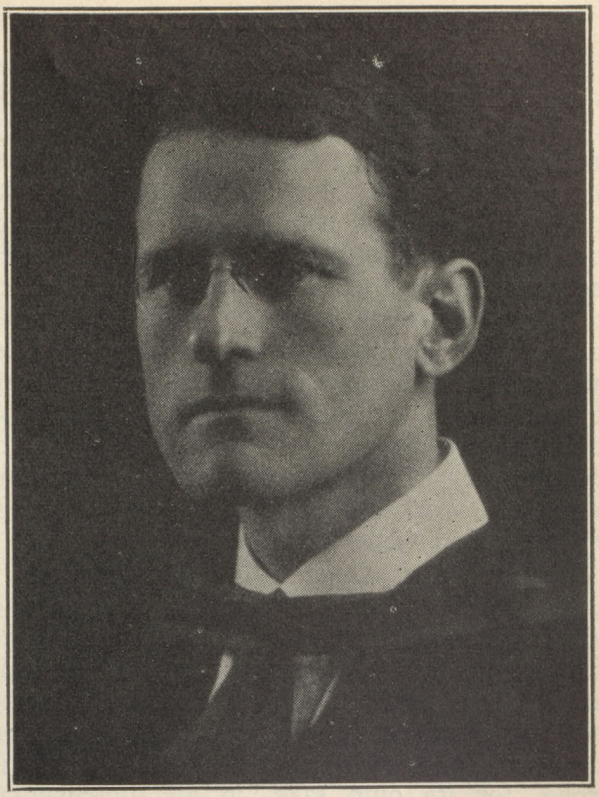
But there is always the difficulty of providing sufficient funds: there will always be that difficulty until the time comes when the University has achieved a unique position in all its departments, and when its preëminence is fully acknowledged. Then, funds will come. We are now making progress towards that enviable position, and any investment now made to achieve that position will easily pay for itself. Until that time comes, we must concentrate on the things more worth while, digging deeper rather than spreading ourselves superficially. There will always be all sorts of pressure brought to bear upon us to begin this and to begin that work of practical training; but we must resist rigorously. We are not in the position of a government-supported institution, obtaining funds readily, but having always to keep one eye on the voter, and therefore tending to become "a service institution," dealing with anything and everything, and, of course, with many things superficially.

2. The second point we must keep in mind is that *we can never be a large institution* as far as numbers are concerned. We shall always be called upon to supply university education for the English-speaking people of this Province, for many from the Maritime Provinces, and for some students from other Provinces. McGill now draws a higher percentage of those students who leave their native provinces for university education elsewhere than any other Canadian university. But the growth of provincial universities, particularly in the West, has been rapid, and I think that this rapid growth will so continue that it will not be long before these universities will have a larger enrolment than we have. The majority of students—say in Saskatchewan—will prefer to go to the University of Saskatchewan because it is a good university, and, being a provincial institution, the fees will be low, and because living in Saskatoon will always be much cheaper than in Montreal. Ninety per cent. of students of universities (and their parents) would just as soon have a degree from one university as from another. All they want is a degree—the quality and content of the degree do not make

much difference to them: and in reality, to ninety per cent. of the student body it really does not make much difference. But there remains the ten per cent. who, in the interests of the welfare of our country, should receive the best university education obtainable. It is a large proportion of that ten per cent. that I want to see coming to McGill. We can only hope to get them if we offer here the best instruction, the greatest encouragement, the highest inspiration and the finest facilities, laboratories and libraries.

I would like to see our university of such an excellence that the other universities in Canada would look to us for their supply of teachers. Had we McGill graduates in teaching positions in the Canadian universities, they would direct the flow of brilliant students to their Alma Mater. Frankly, we have not staffed the other universities in the past, except in some departments. Take Chemistry, for instance. Before 1919 only 4 candidates had received the McGill Doctorate in Chemistry and we did not have a single graduate of McGill in a teaching position in another Canadian university. Since 1920, 64 candidates have received the Doctorate in Chemistry: 15 of them are permanent members of the staffs of Canadian universities and 6 of them of American universities. British Columbia, Alberta, Manitoba, Western, Queens, Mount Allison, New Brunswick and Dalhousie Universities have been staffed by us, and now our Chemistry School is the outstanding one in Canada. Last year the Dominion Research Council gave 24 scholarships to students in that subject going on for post graduate work: 22 of the 24 chose to come to McGill. This is one of the ways in which universities get their reputation. A university is not a great university unless it draws students for *post graduate work*. A very marked increase in the enrolment of post graduate students in recent years is the best evidence of the improvement in our staff. Our Graduate Faculty was re-organized in 1922, and last year nearly 240 students were doing post graduate work here. Those of you who were at the Convocation last May must have been impressed by the number of students receiving the post graduate degrees.

On the value of research work to a university I need only say this: Nothing can take the place of universities in training men for research work. This cannot be done in Research Institutes; it must be done in universities. There, and only there, the fundamental training is given, and if that fundamental training is strong and sound we need not fear for the future of research. Research Institutes could never even have a beginning were it not for the universities. I put it to you, as business men, that universities are even more worthy of support for research work than Research Foundations. World-wide experience emphasizes that the very best student material is attracted by the quality of the research output of a university. But the urgent need, both in our plans for the future development of our Graduate Faculty and for the furtherance of research, is for the funds necessary to found worth-while scholarships to tempt the very best students to McGill.



PERCY ELLWOOD CORBETT, M.A.
(McGill and Oxon.)

Dean of the Faculty of Law and Yale Professor of Roman Law.

Let me now refer briefly to the changes and expansions of the last ten years in some of the major university departments.

First, let me say that we have raised standards throughout. Students now proceeding to Engineering must have at least 1 preliminary year in Arts; those going to Dentistry, 2 years; those going to Law and Medicine at least 2 years, and most of them complete their Arts course first; in fact, 95% of our students now in Law and Medicine are already graduates of another Faculty.

The Faculty of Arts and Science

1. *We have doubled the enrolment* but, what is of much greater importance, the student body is of vastly superior quality. Of the 451 undergraduates in Arts in 1921-22, 60 failed in at least one entrance subject and there were 118 partial students. Last year, nearly 1,000 students were admitted to this Faculty, all of whom had passed the Matriculation tests (in fact, we were forced to refuse admission to many successful candidates). Of these 1,000, only 108 were partials. Furthermore, this figure of 1,000 takes no account of students in the Graduate Faculty who also attend regular classes in the Arts Faculty, nor of approximately 1,000 students taking part-time intra-mural work in the afternoons and evenings under the Committee of Extension Studies.

The raising of standards has thrown a heavy burden on the Faculty of Arts and Science, and more than ever is it the heart and centre of the University. Yet we cannot afford to let this Faculty degenerate into a preliminary training Faculty for candidates proceeding to the professional and technical Faculties. We must keep it strong, for its own sake, in all fundamental departments.

2. *We have, therefore, doubled the teaching staff*—in fact, we have created practically an entirely new staff, so great has been the strengthening in every Department. To refer to one only—the *Department of Education.* The University has always been handicapped by the inferior training given in the Quebec schools. Professor F. Clarke, an acknowledged authority on Education, in the short time he has been at McGill, has already shown himself to possess qualities which will ensure that McGill will send out highly qualified men and women to teach in the schools and that the interest of the community in the importance of good schools will be quickened.

I can say, without any fear of contradiction, that in 80% of the departments in Arts we now are stronger than ever we were before.

3. *The most recent change is the Division of the Faculty of Arts into two groups, one embracing the Humanities and the other the Sciences.*

The Faculty is now "The Faculty of Arts and Science." The increasing importance of pure science in the world to-day has necessitated a concentration of effort. The science subjects of Physiology, Biochemistry, Bacteriology, were formerly included only in the curriculum of the Department of Medicine. They still form part of the curriculum of that Faculty, but in addition are now general university subjects. I have not time now to dwell on the importance of this change, but it is a big step in the direction of progress, and I look forward to a great development at McGill in the near future in that important group of subjects, (Physiology, Biochemistry, Bacteriology, Pharmacology, Zoology and Botany) which comprises the biological sciences. There is now at McGill a very strong staff in these subjects—one that has not escaped the attention of other institutions.

4. *We have built a new Arts Building.*

5. *We have built Moyse Hall.* Yet I must warn you that already the Arts Building is used to capacity; and the many uses to which Moyse Hall is put make one wonder how we ever got along without it.

As to the future, my estimate is that within the next five or six years we shall need an additional capital endowment of about $700,000 to complete plans for an outstanding Faculty of Arts. The most immediate needs are:

(a) Certain salary increases.
(b) Additional professors to strengthen the Departments of English and French.
(c) Funds to endow scholarships which will draw the best students here.
(d) A Students' Loan Fund, to make it possible for the most deserving students to complete their course. The depression has resulted in many of the students being unable to obtain employment this summer; and I know of no safer investment than a loan to a good student which will enable him to obtain his education and a start in life.
(e) The revision and strengthening of the courses in the School of Commerce. I know of no satisfactory course in Commerce given in any university in the Dominion of Canada.

The Faculty of Medicine

In 1920 a reasonable doubt was expressed in certain quarters as to whether or not the Medical School ranked in the first flight of Schools on this Continent. I can say with conviction that to-day that doubt has disappeared, and that there is now no question about it: our School is of the very first rank.

Within the last 10 years we have:

1. Raised the standards of admission and achievement in every year.
2. Limited the number of students and introduced a selective system.
3. Provided a full-time Dean, with suitable staff.
4. Made material and physical additions as follows:—
   (a) The Biological Building.
   (b) The Pathological Institute.

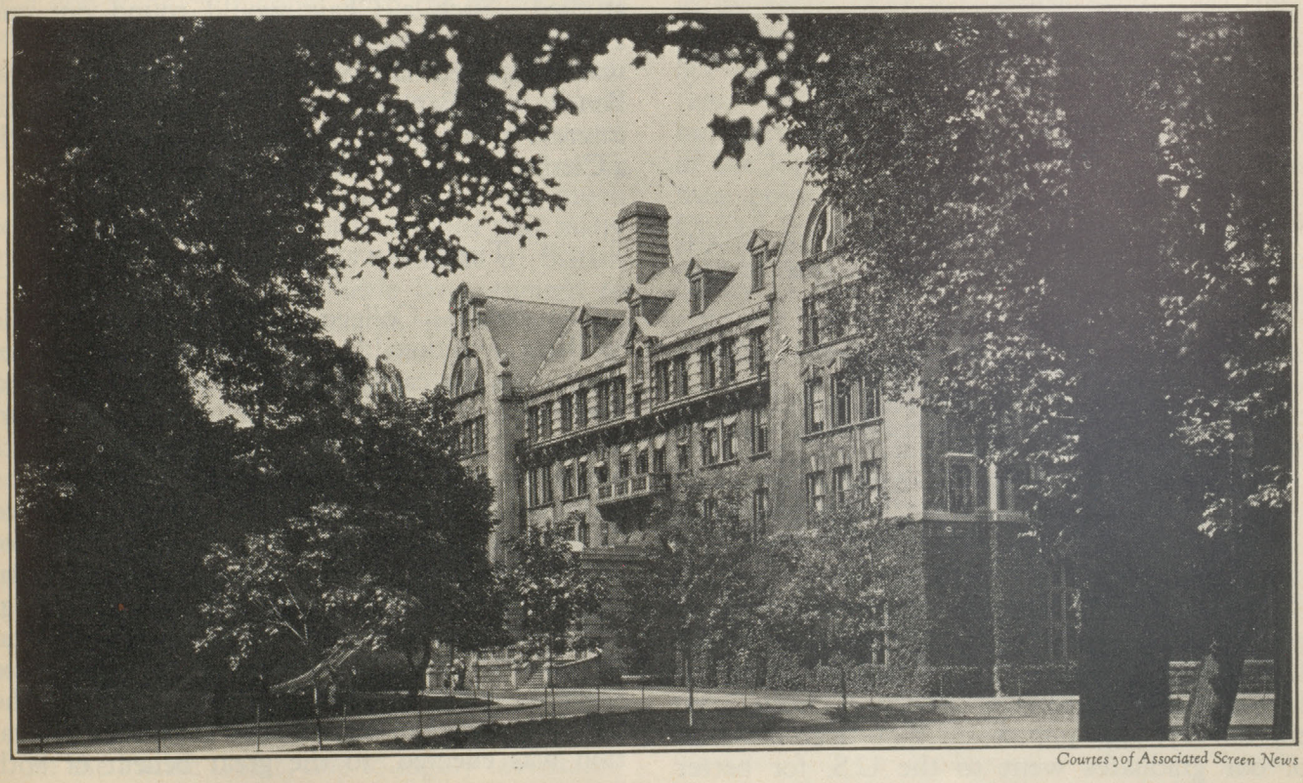
(c) The Laboratory for Experimental Surgery and Animal House.
(d) The Osler Library.
(e) The new Out-Patient Department at the R.V.H., with teaching facilities.
(f) The University Clinic at the R.V.H., with research laboratories.
(g) The R.V.H.-Montreal Maternity Pavilion.
(h) The Pathological and Biochemical Laboratories at the Montreal General.
(i) The Industrial Clinic at the Montreal General.
(j) The enlarged Children's Memorial Hospital.
(k) New Museums and Workshops.
(l) Accessions to the Medical Library.
(m) Scholarships and other funds.

5. We have, therefore, increased to a superlative degree the facilities for research, with the result that there is a great deal of research work in progress. In the Medical Research Institutes we are gradually approaching the extent and breadth of experience of the larger European institutes; this is testified to by the increasing number of applications for scholarships and assistantships in these Departments, even from the United States, England and Germany. Everything possible should be done to extend this policy; it is, as I have said, the life-blood of research.

6. The work done by Drs. Penfield and Cone in the Department of Neuro-Surgery is unique; no other such team exists in America, and probably there is no better combination anywhere in the world. To get them to Montreal was a great achievement, and it has done more than anything else in the last decade to place McGill in the forefront of Surgery. Their cases for operation come from all over the States and Canada. At present we are faced with the danger of losing them, and if Montreal and McGill cannot raise the funds to keep them here it will be a tragedy of the first importance, not only for McGill but for the community.

7. We have raised the fees from $200 to $250, but it seems reasonable, in view of the very much larger fees charged at the best American schools, that they should be again increased, say, from $250 to $400. If this were done, I would strongly recommend that a number of good scholarships be established. The suggestion is also made that, in view of the large number of American students attending, we should charge them a higher fee than the fee we charge students from the British Empire.

Probably it would not be unfair to this Faculty to say that it has received a little more than its share of the funds made available during the last ten years; yet, it is our outstanding Faculty, and no doubt in the past the reputation of McGill has been based more upon the work of this School than upon any other single factor.



Courtesy of Associated Screen News

THE MACDONALD ENGINEERING BUILDING

It is true, too, that we do not at present draw the proportion of students from Canada that we should. There are several reasons:

(a) The establishment in recent years of provincial medical schools. These take many students who would rather study in their own province, owing to the much lower costs involved.
(b) Owing to our indifference in the past to the biological sciences, we have not furnished other Canadian universities with teachers in these subjects, and biological teachers are in a particularly favourable position to influence men in their choice of a larger university.
(c) Absence of worth-while scholarships to attract the cream of the Canadian student body here.

Finally, let me say that to keep our School in a preëminent position we must have none but the most outstanding men and the most inspiring teachers filling our professional chairs. McGill must become a centre for medical research. We must turn out men of sufficient character and qualifications to justify their being asked to fill chairs in other universities. We must see to it that our School is imbued with the true scientific spirit. We must develop a great post graduate medical school here. When financial conditions improve, I recommend expansion in the following directions:

(a) The Department of Bacteriology.
(b) The Department of Physiology.
(c) Provision of scholarships.
(d) Clinical lecture theatres.
(e) Expansion of medical library.
(f) Facilities for co-operation with hospitals in study of psychopathic diseases.

Faculty of Engineering

In this Faculty we have:

1. Raised the standard, making at least 1 year in Arts compulsory before entering upon the study of Engineering.
2. Strengthened the curriculum.
3. Tried to keep pace with the requirements of industry.
4. Built a new Electrical Wing.
5. With the space thus freed we fitted up an Hydraulic Laboratory. Prior to this, we had nothing worthy of the name.
6. We have built a new Highway Engineering Laboratory and we have fitted up a new Gas and Petroleum Engine Laboratory and a Mining Engineering Laboratory.

As a result of our co-operation in an International Survey of Engineering Education, it was found that our general policy and aims were in harmony with recommendations resulting from the Survey. An impression that large numbers of our graduates went to the U.S. for better incomes was not supported, the facts and figures of incomes received by men from 5 to 25 years at work in the profession being almost the same in both countries. 10.7% of our graduates reside in the U.S., and almost 40% in Montreal and district.

Needs

As in other faculties, emphasis is laid upon the importance of the provision of staff and facilities for carrying on a post graduate school and for dealing with new and important phases of work. We must provide new buildings for Mining and Metallurgy and Geology, and we must find funds for maintenance of equipment and the purchase of new equipment, and funds to endow open fellowships or scholarships which will be so worth-while that we will attract able students.

The Faculty of Law

I feel that under Dean Corbett the Faculty has made splendid progress. At the 1931 Convocation the graduating class was not only one of the largest within the decade, but every man save one had already completed a course in Arts.

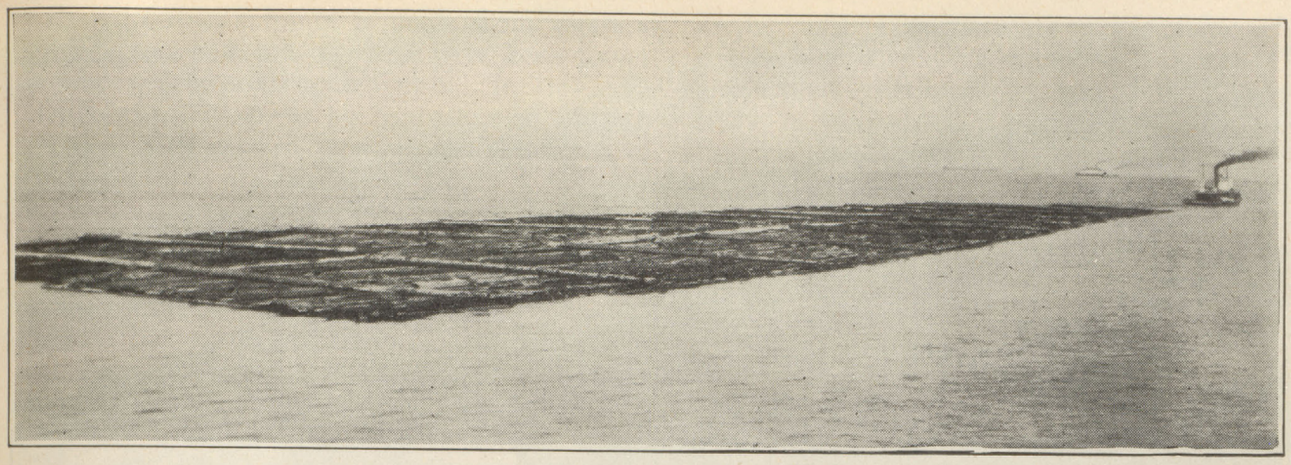
The outstanding need in the Faculty is the establishment of a Chair of Comparative Law and Legal Philosophy. There is no university where the subject might be more appropriately studied. Such a Chair would round out our Faculty and attract post graduate students. It was suggested last year that members of the Bench and Bar in this Province might well interest themselves in the endowment of such a Chair in memory of the late Eugene Lafleur.

The Faculty of Agriculture

Macdonald College was founded by Sir William Macdonald "for the advancement of education, the carrying on of research work and investigation and the dissemination of knowledge—all with particular regard to the interests and needs of the population in rural districts."

In the Faculty of Agriculture we have two distinct types of student: (a) those in search of general training in the science of modern agriculture to fit them for more intelligent farming; and (b) those proceeding to professional work in agricultural subjects. Previous to 1920, these students were all mixed up together in the different classes of instruction. In 1920 a separation was effected, to the great benefit of both

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ON THE WAY TO THE SAWMILLS

This photograph, taken in Vancouver harbour, shows a flat raft of logs approaching its destination. The ship in the background at the right is the North Vancouver ferry.

Newsprint Manufacture on Canada's Pacific Coast

By C. Leslie Copland, B.A. '26

WHEN the Editor of *The McGill News* invited me to prepare an article dealing in a non-technical manner with the manufacture of newsprint in British Columbia, I agreed gladly for two reasons. In the first place, it would seem only right that all university graduates should understand in a general way the various stages in the transformation of wood into paper; and, secondly, the East has always been so much to the fore as a producer of newsprint that many may be unaware that there are mills in British Columbia operating on a scale large enough to fill all local requirements, and, in addition, to export quantities of paper to the United States, South America, Australia, New Zealand, Japan, and China.

Perhaps the best way to describe the various processes that take place in a modern pulp and paper mill is to imagine that one is conducting his reader on a personal tour of the mill. Thus, as this story proceeds, we shall look on together and see the wood become pulp and the pulp, in turn, become paper.

The Wood

On the Pacific Coast, due to highly favourable climatic conditions, the growth of timber is rapid and the individual trees attain gigantic size; it is, indeed, not uncommon to see trees towering 250 feet into the air, having trunks twelve feet in diameter. The varieties most used for pulp manufacture—spruce, hemlock, and the true firs—do not attain quite as large proportions as their widely-known cousin, the Douglas fir, but they include many splendid timbers. Most of the logs are cut far from the mill, and come from points on the coast all the way from the United States to Alaska. They are towed by tugs in flat rafts, or Davis rafts, according to the nature of the waters to be traversed; the flat rafts are satisfactory for use in the sheltered waters inside Vancouver Island, but to negotiate stormy seas the logs are built up in secure piles that float with about fifteen feet of their bulk under water and the same above. These latter are the Davis rafts, many of which come down every year from the Queen Charlotte Islands to the paper mills. One other method of transportation may be mentioned: the "log carriers" are boats specially adapted to holding loads of timber, and these are sometimes preferred to the rafts. On arrival at the mill, the logs are stored in the water, to be cut as required; there are thus none of the great piles or stacks of pulpwood seen in the East, and the fire hazard of a hot, dry season is materially reduced.

The reduction of the logs to a suitable size



A DAVIS RAFT IN THE LOG POND OF THE POWELL RIVER COMPANY, LIMITED

The size of the great logs used for pulp manufacture on the Pacific Coast is clearly revealed. Note the figure of the man whose outstretched arms fail to equal the diameter of the giant tree trunk in the centre.

requires a high-speed sawmill; here logs forty feet and up in length, and with diameters ranging from four to six feet, are often seen, and these are in decided contrast to the average pulpwood logs of the Eastern mills. Bandsaws cut the logs into great cants; edgers further reduce the size; and the slashers finish the job of turning out blocks thirty-two inches in length and ranging from eight inches square downwards. Endless chain conveyors transport these blocks to the wood mill, where in a huge toothed drum they are slowly rotated and sprayed with water. This procedure removes most of the bark; any strips remaining on the blocks are removed by hand before they proceed to a further stage.

In connection with the story of the wood it should be mentioned that there is a by-product known as "hog-fuel," or sawmill waste, which is used extensively in the production of steam. Hog-fuel is, in fact, the main fuel of the mill; large quantities of it are produced in the cutting up of the logs, and it is purchased in barge-loads from other B.C. sawmills. To the latter this is a great advantage, for they have a new source of revenue in their waste, which was formerly nothing but a liability.

The Pulp

At this point in the story of paper there is a parting of the ways. For, following the usual methods of manufacture, there are two kinds of pulp which must be made in order to complete a preparation suitable to feed to the newsprint machine. These are groundwood or mechanical pulp, and sulphite or chemical pulp; and it is because the physical nature of the raw material needed for each is distinct that there are two separate threads to the story. A little later, the two threads will be reunited, as the groundwood and sulphite pulps come together to form the machine pulp.

The groundwood pulp forms approximately 75% of the final mixture, and we shall consider it first. The blocks of wood from the wood mill are conveyed to the grinder room; here they are fed to the individual grinders as required. The grinders used are all of the "pocket" type; the continuous method of grinding is not in use, as apparently this is not applicable to the wood of the Pacific Coast. In the grinder the wood is held under pressure against a rapidly revolving cylindrical sandstone, whose surface is artificially roughened or "jigged" in a spiral direction in order to give fibres of suitable length. As the groundwood pulp comes from the grinders it contains many slivers that have been torn off the wood without being properly pulped; by the use of much water and several different sizes of screens these are washed and screened out, then the excess water is drained off, and the thickened pulp is ready to proceed to the beater room.

Pacific Coast sulphite is made from western hemlock and true firs, as these have been found to give a very satisfactory pulp. In this connection there must be no confusion of western hemlock with eastern hemlock, as the fibres of the two woods are entirely distinct. The wood is prepared by passing it through a machine known as a chipper, which reduces the blocks to small chips; these are kept within a fairly narrow limit of size by rapid vibration over screens that automatically sift out the oversize and the smallest chips. Some mills have special chippers that handle the small edgings and slabs from the logs, thereby making excellent use of waste material. The chips are run into a large steel-encased and brick-lined tank called a digester, and the spaces between the bits of wood are filled in with sulphite acid, a prepared acid liquor. Steam is applied to this "cook," and it is kept in the digester altogether about eleven hours, during which time the wood is broken down in such a way as to dissolve out the materials encrusting the cell wall, and thereby to leave fibres of pure cellulose. The waste liquor is drained out, and the sulphite pulp is washed and screened to remove any remaining pieces of wood and any impurities.

In the beater room take place a number of processes, all of which are of great importance in determining the qualities of the finished paper. First the groundwood and sulphite pulps, with their respective consistencies—or thicknesses—adjusted by automatic regulators, come together in the right proportions in mixing tanks, where the mass is stirred by revolving paddles. Then any "filler" that may be desired to give extra body to the sheet is added to the mixture. Finally, the dyes that are necessary to impart a pleasing colour to the paper are mixed in; numerous shades of white, as well as pink, yellow, and green newsprint are made, so the use of dyes requires considerable skill and experience.

The Paper

In a pulp and paper mill it might with considerable truth be said that "all roads lead to the paper machine." For no matter how large the many processes seem to bulk in themselves, actually they are important only insofar as they contribute to the production of a fine sheet of paper. And, as one might well expect under these circumstances, the paper machine is the most complicated of all those found in the various parts of the mill. At one end of the machine—the wet end— the pulp is thin and watery; at the other—the dry end—the product is the reel of newsprint; and this process is a continuous one, carried on at speeds ranging up to as high as 1100 to 1300 feet a minute.

The "machine furnish"—as the thoroughly mixed pulp is known in its last stages—passes from a large box at the extreme wet end of the machine onto the wire. This wire is a brass or bronze mesh which extends the full width of



MACHINES NUMBERS 5 AND 6 IN THE PLANT OF THE POWELL RIVER COMPANY, LIMITED, BRITISH COLUMBIA

Each of these machines, whose processes are described in Mr. Copland's article, is capable of producing 125 tons of newsprint in a 24-hour day.

the machine (this may be between 125 and 300 inches) and revolves in endless fashion at the speed of the machine over a series of rolls; the minute holes in the wire, and the speed at which it runs are so calculated as to allow a large proportion of the water to pass out of the pulp by the action of gravity. In addition, there are suction boxes below the wire into which still more water is drawn. As a result, when the wire turns downwards to make the second portion of its circular trip, the sheet of pulp is firm enough to bridge the gap between the wire and the felt. This felt is much like a large travelling blanket, and in the rapid journey between rollers and over the felt a lot more moisture is squeezed out of the pulp; it begins at this time to look somewhat like a sheet of paper.

The most imposing part of the paper machine is the dryer section, to which the damp sheet of "pulp-paper" goes as it leaves the felt. In fact, at a glance, it looks rather like a fair-sized rectangular house, with incomplete walls which allow a glimpse of innumerable rolls, and a roof capped by a chimney out of which the moisture-laden air is continually escaping, while fresh air is being supplied below. Through the dryers the sheet is carried up and down—but ever gradually ahead—over heated rolls, and the evaporation of moisture goes on rapidly. At the entrance to the dryers the sheet contains about 69-73% of moisture while by the end of the trip this content has been reduced to between 7% and 8.5%, which is entirely satisfactory for commercial use.

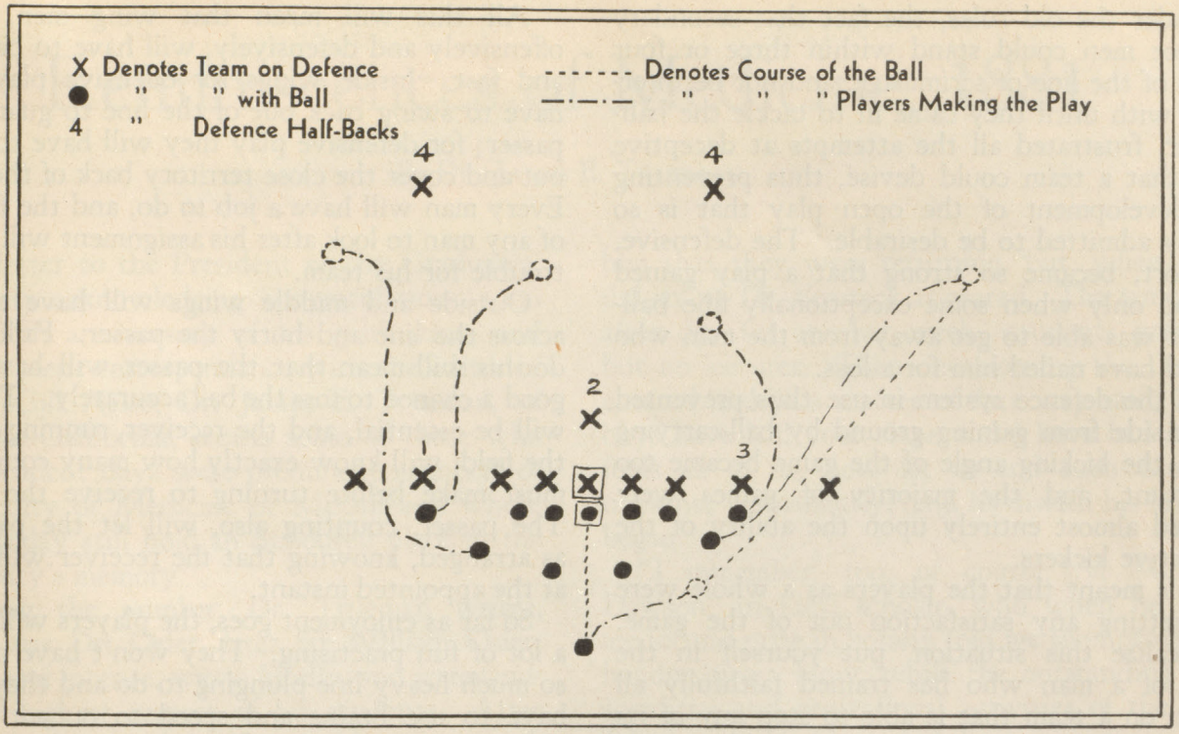
Coming from the dryers, the sheet of newsprint goes over and through a series of iron rolls known as calender rolls; the effect of this passage is to impart a desirable finish to the surface of the paper, at the same time smoothing off any small projections and giving the sheet a perceptible shine. It is then wound on the steel reel, and its progress at the high speed of the machine is over.

(Continued on Page 60)



BRITISH COLUMBIA NEWSPRINT READY FOR SHIPMENT

As Mr. Copland mentions in his article, newsprint is packed and shipped so as to meet conditions on the way to and at its destination. The photograph shows, on the left, a "pack" prepared for shipment to China; in the centre two "ordinary packs"; and on the right a "pack" for South America.



HOW A FORWARD PASS THREAT WILL WEAKEN THE DEFENCE

This diagram has been prepared from a sketch by Mr. Shaughnessy, who returned to McGill as Football Coach this autumn. As defensive players Nos. 1, 2, and 3 will this year have to drop back to guard against a forward pass, such as the one shown in the plan, thus weakening the line, the added strength that accrues to the attacking team is clearly indicated.

The Forward Pass in Canadian Football

By FRANK J. SHAUGHNESSY

IN reply to the suggestion of the Editor of *The McGill News* that there should appear in the September number a brief account of the forward pass, to be used in senior Canadian Intercollegiate Rugby this autumn, the following is an explanation of why the pass has been found advisable and of how it is hoped that the play will improve the game. Argument for and against the forward pass has been waged in sporting circles in Canada for years, and the play has been used extensively in intermediate and junior competition in the East, and in senior games in the West, also in the Dominion finals, but this year the play will be used in senior competition from coast to coast and will, consequently, be introduced to many players and spectators who formerly knew of it only from hearsay.

Briefly it may be said that the play has been introduced into Canadian Rugby for one reason only—to give the offensive a weapon that will lessen the tremendous superiority that the defensive has enjoyed for many years. This superiority became so marked, notably in the senior Intercollegiate games of 1930, that the matches lost greatly in interest to spectators and, what is infinitely more important, perhaps, in pleasure and satisfaction to the men who played them.

Under the old rules, the fact that secondary defence men could stand within three or four yards of the line of scrimmage, and not be interfered with until they came in to tackle the ball-carrier, frustrated all the attempts at deceptive play that a team could devise, thus preventing the development of the open play that is so widely admitted to be desirable. The defensive, in short, became so strong that a play gained ground only when some exceptionally fine ball-carrier was able to get away from the man who should have nailed him for a loss.

As the defence system in use thus prevented either side from gaining ground by ball-carrying plays, the kicking angle of the game became too important, and the majority of games were decided almost entirely upon the ability of the respective kickers.

This meant that the players as a whole were not getting any satisfaction out of the game. To realize this situation, put yourself in the place of a man who has trained faithfully all season on a team that is able to stop any of its opponents' plays, is at the same time able to stop run-backs of kicks, and is able to gain more ground than its opponents—possibly twice as much—through its own ball-carrying plays, yet loses game after game because a star kicker on the opposing side can boot the ball sixty to seventy yards against your man's thirty to thirty-five yards. What good are faithful training and first-class team play in that situation?

The forward pass, after Canadian teams master it, will compel the secondary defence men to play further back, in order to cover the potential receiver of the pass. The threat of a pass will draw them out of position and make more gains possible from running plays. Teams, in consequence, will have to use faster, lighter, and more brainy players.

The forward pass itself will not be very successful as a ground-gainer in the first year, but will give other plays a better chance to gain. Before the forward pass achieves a great deal for itself, the passers will have to acquire sufficient skill to send the ball down the field to a receiver who will be able to take it while running at full speed. Any other sort of a pass will not be successful and will usually result in the ball being intercepted by an opponent.

Plays will have to be devised to conceal the fact that a pass is to be thrown, so that the defenders will be drawn out of the area into which the ball is to be tossed. Conversely, plays will be invented, suggesting that a pass is to be thrown, but really cloaking a ball-carrying play through some chosen spot in the line.

All this will mean that wing men, both offensively and defensively, will have to be alert and fast. Inside wings for offensive play will have to swing back out of the line to guard the passer; for defensive play they will have to back out and cover the close territory back of the line. Every man will have a job to do, and the failure of any man to look after his assignment will mean trouble for his team.

Outside and middle wings will have to get across the line and hurry the passer. Failure to do this will mean that the passer will have too good a chance to toss the ball accurately. Timing will be essential, and the receiver, running down the field, will know exactly how many counts he must make before turning to receive the pass. The passer, counting also, will let the pass go as arranged, knowing that the receiver will turn at the appointed instant.

So far as enjoyment goes, the players will have a lot of fun practising. They won't have nearly so much heavy line-plunging to do and they will have to use brains and speed to outwit their opponents, rather than the brawn and strength required in former years, though brawn and strength will still be a necessary factor.

The spectators, I believe, will like the pass. At first they will grumble because more passes are not completed, but they will see the ball twice as much as they did in other years and there will be ten times as many thrills, for a game will seldom be decided until the final whistle blows, on account of the fact that any pass may result in a touchdown.

More lateral passing should result from introduction of the forward pass, as there will be a better opportunity to pass laterally after a forward pass has been caught deep in an opponent's territory than there is now, when a lateral pass is usually made behind one's own line of scrimmage. The secondary defence men will be scattered by threat of a forward pass and more players will get a chance to carry the ball, as any forward may accept a lateral pass after the forward pass play is completed.

This is a most important factor in the new rules and one which there is every reason to hope will prove acceptable to players and spectators alike. On the whole, it would seem that the new play will add immensely to the interest of the Canadian game from every point of view, and will contribute just the element of daring and initiative that the overpoweringly strong defensive has crushed in the past. If this should prove to be so, and I believe that it will, then players and those in the stands will rejoice unreservedly.

Reminiscences of Medicine, 1881

By Dr. James E. Trueman

IN a letter to the President of the Graduates' Society acknowledging congratulations upon the fiftieth anniversary of his graduation, and in subsequent correspondence with the editor of *The McGill News*, Dr. James E. Trueman, of San José, California, recalls some of those who in his student days were prominent members of the Faculty of Medicine of McGill and whose names today still hold an honoured place in the University's memory.

Among the number, Dr. Trueman writes, "there was Dr. Osler, later Sir William Osler, earnest and intense, witty, kindly, and commanding the highest respect of his students. After beginning practice, I was flattered by correspondence with him in reference to a well-marked case of ulcerative endocarditis, a disease of which he was making a special study and thorough investigation. He learned from a friend of mine that I had a case under my care, necessarily fatal, of course, but he desired to know all the details.

"Then there was Dr. Roddick, later Sir Thomas Roddick, beginning to discard the theories that may best be indicated by the then well-known term 'laudable pus' and enthusiastic about antisepsis, the spray, and Lister's methods. Asepsis was to come later.

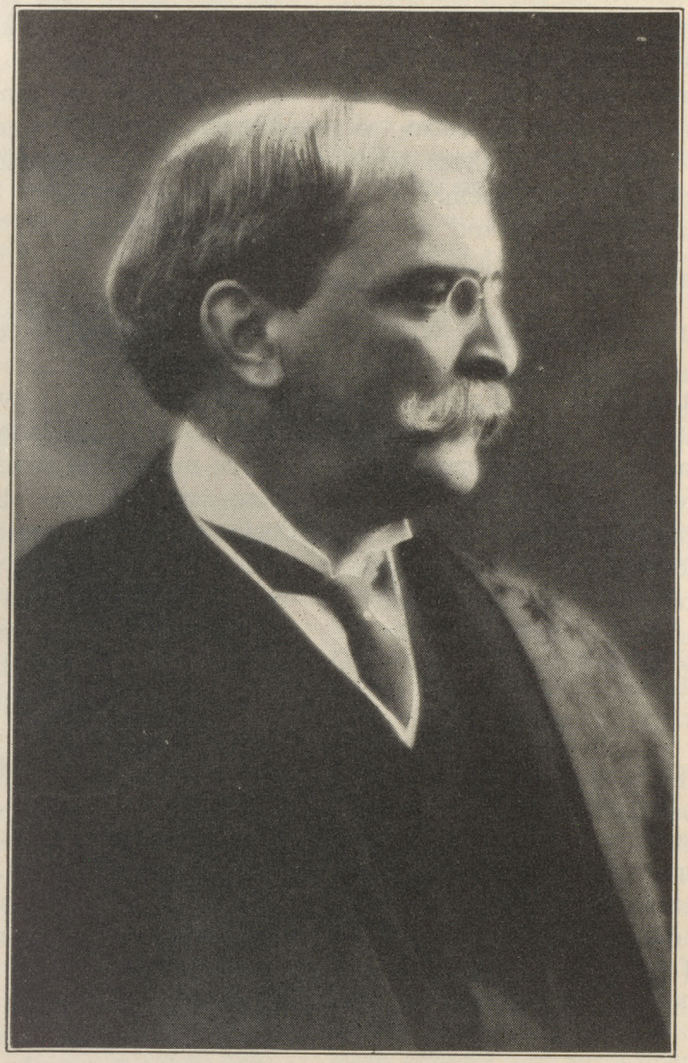
"Another man of note was Dr. Howard, earnest, dignified, and scholarly, saying, at a time it must be remembered when drugs were a doctor's main reliance, 'few drugs are specifics and most may be discarded.'

"There was Dr. Fenwick, too, a bit arbitrary, but direct and positive. Lecturing on a certain infection, I recall his saying, 'they talk about eliminating this disease, but I believe that if a man once acquires it, he will have an infected ghost.' One humorous incident in reference to this outspoken and aggressive, but very human, teacher occurs to me:

"For some fancied grievance, his students went on strike, or 'sloped,' to use the term then popular, and remained away from his lectures for a week. Then, seeing their folly, they notified him that they were returning, but, when they did so, no Dr. Fenwick appeared. The same day after day for another week—students present, but no lecturer. Then one morning the Doctor entered and in a matter of fact way said, 'You boys have had your slope and I have had mine, fools all of us, now let us end such damned nonsense permanently,' and forthwith his lecture began.

"I remember, too, of course, Sir William Dawson, an ideal scholar, who when he gave me second prize in botany told me to improve my handwriting. Now, while the outstanding personalities and professional activities of the men I have mentioned render them so unforgetable, there were other members of the Faculty whose duties in lecture-room and elsewhere were just as ably and faithfully performed, but to most of us who were students at the time they personified routine, close attention, and study. For years my McGill medical diploma, bearing many of their names, hung framed in my office, but on the morning of our disastrous earthquake twenty-five years ago the office building and all its contents were burned, my loss including both the diploma and my group photograph of the Class of Medicine, '81. At the Convocation in 1881, it may be of interest to note, we were honoured by the presence of the Marquis of Lorne and his gracious wife, the Princess Louise, daughter of Queen Victoria.

"In concluding these few reminiscences, I may say that I regard a long practice of medicine as the most wonderful experience in life. While thanks to the good-will of this city of San José, I retired financially comfortable at the age of 70, I am afraid I shall not be present at the Graduates' Reunion in October. I would like to see Old McGill and Montreal again, but to make the trip would upset fixed habits, mental and physical, and my peace of mind says 'No.' To quote Longfellow 'The kindest herald by our fate alloted beckons,' though I am quite willing he should keep on beckoning, as you so kindly express the wish, for many years to come."



SIR WILLIAM PETERSON, K.C.M.G., LL.D.
Principal of McGill University, 1895-1919

Sir William Peterson, K.C.M.G.

By Ethel Hurlbatt, LL.D. 1930

AN appreciation of William Peterson lately received from one who was a pupil when Peterson was the young Principal of the University College, Dundee, prompts the offer to *The McGill News* of this memory of McGill's Principal in the years from 1895 to 1919.

In the appreciation Mrs. Wedd, née Rachel White, of Newnham College, Cambridge, a distinguished classical scholar, owing much to her early training by William Peterson, gives an insight into the situation at Dundee as Peterson found it, and into the young Principal's character and the part he played there. Her account follows:—

"When I first met William Peterson in 1889, it was not long after he had become Principal of Dundee University College and just after the affiliation of University College to the University of St. Andrews had taken place. The negotiations preceding this affiliation had been protracted through many years and had been the occasion of much bitterness and vexation of spirit. Suddenly, a controversy, which had come to be regarded as a perennial and ineffective source of bickering, was brought to a successful issue, and the upstart University College was recognised as a constituent part of the premier university of Scotland.

"This consummation was, we learned, largely due to the tact and diplomacy of the new Principal of Dundee University College. He came as a youthful outsider to the inveterate debates on the subject; he could see, and focus attention on, the really relevant issues. To those who held that St. Andrews had everything to offer and nothing to gain by the fusion, he pointed out that if St. Andrews was to continue its ancient traditions as a medical school, this could only be done if, in conformity with modern requirements, its science students could walk the hospital of a great industrial city; that, without this opportunity, it was inevitable that the nascent science department of University College would in time supplant the older foundation in the Natural Sciences. By steadily dwelling on this obvious if unpalatable truth, Peterson brought the protracted controversy to an end. The settlement naturally left some soreness behind it; the Progressives accepted the inevitable; the Die-Hards sullenly resented it; and there was, one heard, a widespread feeling in the Ancient and Royal Borough that the ingratiating charm and adroitness of William Peterson had brought about the union on terms unduly favourable to Dundee.

"It was interesting, therefore, to meet this Macchiavellian intriguer. When one got to know him, one realised that his gifts were just those required to effect the settlement of a thorny question—gifts which might have won for him success at the Bar, for which profession he was, I believe, at one time destined. In Peterson the severely logical structure of his mind was clad in an outer garment which won assent by its persuasive grace and charm, its delicate raillery, a subtle appreciation of the human comedy, a dislike of priggishness in any form. These characteristics,

combined with his high standing as a classical scholar and his wide sympathies with every branch of learning, made him the ideal head of a foundation struggling to emerge into full university status.

"By birth a Shetlander, Peterson displayed, as well in character as in appearance, that curious blend of the qualities of Northerner and Southerner which lends credence to the tradition of an admixture of Spanish blood, dating from Armada-days, among the islanders. Further, his rare intellectual qualities were rooted in a disposition singularly sweet and tender. At a time when the Principal's Greek class at Dundee University College was composed of myself alone, I once asked him for news of his little son, who was ailing. At that very moment, unknown to me, the boy was undergoing a severe operation. The enquiry was too much for the poor father, and he broke down completely. Music meant a great deal to him. I remember once finding him on a Sunday afternoon at the piano playing and singing to himself; and he introduced me then to his favourite hymn, that haunting and too seldom heard one beginning, 'O Light, that leadest me on,' of which both words and melody were composed by a blind Scottish divine."

Though intended solely as a personal tribute, Mrs. Wedd's sketch could hardly be excelled as an introduction to McGill's new Principal in 1895. Dundee had been a school for the development of qualities demanded of those who are to be true to their convictions in educational policy. He had shewn himself fitted for the work to which his life was thenceforth to be given, and had shewn also an unswerving resolution in the pursuit of those principles and ideals which he conceived to be essential to the conservation and development of an institution of learning. These conceptions, and his duty in enforcing them, were for him a true religion. To fail in integrity in this respect would have been for him to fail in duty to God and man. McGill was merely a larger field in which these qualities were exhibited. Such, then, was the new Principal whom the Chancellor of the University, Lord Strathcona, found and commended to the Governors—of strong personality, refined by learning, tried in the field of educational conflict, reinforced by administrative responsibility and experience, enriched by an already wide contact with men and affairs.

This is not the place to attempt to give a record of his Principalship. A history of his régime would require an intimate inner knowledge of University affairs from 1895 to 1919. Moreover, personal observation dates only from 1906. All that can be attempted is to add to Mrs. Wedd's sketch a further picture of a man in his familiar setting during fourteen years, guided by some knowledge of his aims and attitude in University life, and by an appreciation of his constantly expanding generosity of spirit.

For one coming from scenes where comparable conditions, aims, and conflict in the educational world existed, it was not difficult to penetrate to some understanding of Sir William's course and encounters in his new sphere of work. It was not a sealed book, but an old familiar one, which lay open, in those years. A remark of his, made in London in 1906, "Don't think too much of the change of scene, it is only as if one were going round the corner into the next street," rang true. It had been just that to him. Sometimes there was a very open page for all to read; discussions in Faculty and in Corporation. Then, again, there were kind confidences given for help and guidance—all in their turn throwing further light upon his character and aims.

He cared greatly that all who came to McGill should feel for the University the same affection and loyalty that he gave to it. Countless little acts of kindness were directed to that end, and to interpreting to the newcomer the colleagues, students, events and traditions, so that mutual respect, esteem, and liking might make the cements holding University life together. It seemed that nothing gave him greater pleasure than to show distinguished visitors the resources and charms of McGill; and he made such visits charming, both to his guests and colleagues, for the sharing of these visits, either on the Campus or in his own home, with colleagues of Faculties and Departments, was his constant watchful care. It heightened the latters' sense of pride in their University.

Sir William's appearance is recorded in the excellent photograph that greets everyone entering the Redpath Library. It is hoped that a replica of that photograph will keep him in the memory of those entering the Royal Victoria College by its new doorway, or passing through the old building to the new, especially in the memory of students and graduates of the College, which he fostered with so much delight and zeal. The photograph in question shews a head of singular beauty, which it would have rejoiced a sculptor to model, or an engraver to define and elaborate as a study of curved lines; a head which by compactness and nice proportions conveys a sense of weight and strength. His figure in repose or in motion conveyed the same sense; broad shoulders fit to carry burdens, vigorous carriage, bracing aspect. His energy was remarkable. "What a little pony! How he takes the hills!" was Sir William Macdonald's admiring comment, a tribute to the sturdy figure and the indomitable will. As Professor John Macnaughton has said, "He was tough as he was fine." His natural response to any difficulty presented was, "Well, let us get busy," and the bracing, stimulating helpfulness usually cleared the air. He was not a small man, however, but of medium height and thick-set. There he stands, in Mr. Nobbs' picture in the Assembly Hall of the McGill Union, by the side of the Benefactor, for those who would recall or learn more of his outward bearing.

That same picture symbolises the joint work for McGill of Principal and Benefactor. A survey of the Campus, such as the two men are represented to be making, and the record of the years from 1895 to 1919, as summarized in the University Calendar, supply the explanation of what Macnaughton describes as "the steady advance of a massive and splendid work," Crowded into twenty-four years there was achievement "in rounding out the University, in outline at least, to the full height and breadth of the modern ideal."

William Peterson was fortunate in the time of his coming to McGill. He arrived during the life-time of some who, like our College Founder, Lord Strathcona, had made great fortunes, and who in nothing were more distinguished than in their timely benefactions to McGill. And not the least service of William Peterson to McGill was the confidence he inspired in these donors and the influence he exerted in the wise bestowal of their gifts.

Each new creation, be it the Royal Victoria College, the Conservatorium of Music, the McGill Union, or Macdonald College, was a precious new child in which he delighted; his visits to each being a favourite recreation. On the Sherbrooke-McTavish Street property, rescued for McGill after a desperate danger by the generosity of Sir William Macdonald, he earnestly desired to see erected, as a memorial to McGill and other Montreal men who fell in the War, a Convoca-

tion Hall that might serve also the purposes of Music. The new Macdonald Park and Stadium he saw; the Residences he planned there for men students were not to be in his day. Surely his spirit, if not his name, will haunt those buildings of his imagination if ever they come to life

If the pages of the University Calendar show a record of building and of endowment, there was the other work accomplished of welding and compacting McGill into a strong whole. There were tests of strength in struggles against centrifugal tendencies or other menaces and long years of determined action, patient effort, and persistent watchfulness went to the solution of some problems, bringing about results so natural to a later generation as to leave no trace or thought of the cost to him. The commonplace of to-day was the new era of yesterday. But that to him was work and life. There was, during those years, the advance of McGill in national and international reputation, recognition being afforded by gifts from the Carnegie Foundation and by a flow of McGill of students from other lands.

In this respect, it should not be forgotten how greatly William Peterson's continued achievement in Scholarship enhanced the reputation of McGill on the Old and the New Continents, how widely his classical knowledge was known and appreciated outside of Canada. He re-discovered the famous Cicero, Cluny MSS (9th Century A.D.) finding it in the Holkham Library, and was the first to point out its place of origin and its value. In 1907 and 1910, he contributed two volumes to the six volume Critical Edition of Cicero's Speeches, published by the Clarendon Press (Oxford), and later "Tacitus Dialogus de Oratoribus," text and translation, to the Loeb Classical Library, 1913.

So much that he made endures, so many things he has made possible for the future. He built and he laid foundations. A wise counsellor and friend, Mr. Walter Vaughan, was at his side through many of these years of effort, and, like Sir William Peterson, faced the solving of present problems with a long view to the future. It is good to think that his name is entwined with that of another over the door leading to the Warden's quarters in the new Royal Victoria College Buildings. Both men, in affairs, sought to be "as competent with the telescope as with the microscope." They were colleagues, charged with the interest of the Future as well as of the Present.

Then there came the check of the War; and the Principal saw men go, young students, graduates, staff, to those harder fields, often in units bearing the standard of McGill: Hospital, Battery, reinforcements from the C.O.T.C. The Campus became a drill ground; faculties were depleted; the University was crippled, but was kept from the worse evils of disuse and depression by the high selfless courage of its sons that gave light and strength, and so made endurance possible.

Later the time came for the inaction of the last months. He left McGill spent in her service. Two memories remain: a last scene in Montreal, the Principal and Lady Peterson in the summer sunshine—he saying: "It is but half a man you see"; she, grief personified; each in their mutual affection making their little sallies of wit; a picture of courage and beauty surpassing words, almost beyond belief. From him there was no word of repining, only of exhortation concerning the things that had been in his charge and which he must now leave; for as his obituary notice in the London *Times* later ended, "such love as his for an institution knew nothing of self."

Osler's Textbook of Medicine

By H. E. MacDermot, M.D., F.R.C.P. (Can.)

NO one is ever likely to turn to medical textbooks for light reading, least of all a layman. They are a type of literature with a very natural austerity, if not aridity, but investigation will show that these forbidding qualities are not always present in equal degree. For any layman inclined to explore, Sir William Osler's "Principles and Practice of Medicine" is without doubt the best textbook on which to begin—and probably to end! I am not referring to its excellence as a source of medical knowledge, for there are other textbooks just as authoritative and comprehensive. But there is no other in which one will find a greater wealth of historical and literary allusion, a more varied selection of the unusual and impressive; or a style with greater freshness, vigour, and lucidity. Osler has left us an account of how the book came to be written:

> On several occasions, in Philadelphia, I was asked by Lea Bros. to prepare a work on diagnosis, and had half promised one; indeed, I had prepared a couple of chapters, but continually procrastinated on the plea that up to the 40th year a man was fit for better things than textbooks. Time went on, and as I crossed this date I began to feel that the energy and persistence necessary for the task were lacking. In September, 1890, I returned from a four months' trip in Europe, shook myself, and towards the end of the month began a work on Practice. I had nearly finished the chapter on Typhoid Fever, when Dr. Granger, Messrs. Appleton's agent, came from N.Y. to ask me to prepare a textbook on Medicine. We haggled for a few weeks about terms, and, finally, selling my brains to the Devil, I signed the contract. My intention had been to publish the work and have Lippincott or Blakiston (both of whom offered) handle the book, but the bait of a guaranteed circulation of 10,000 copies in two years and fifteen hundred dollars on the date of publication was too glittering, and I was hooked.

Then he gives the details of his daily task.

> Three mornings of each week I stayed at home and dictated from 8 a.m. till 1. p.m. On the alternate days I dictated after the morning hospital visit, beginning about 11.30. The spare hours of the afternoons were devoted to correction and reference work . . . After 5 p.m. I saw any outside cases, dined at the Club about 6.30, loafed until 9.30, bed at 10, up at 7 a.m.

All this and more is pencilled on the flyleaf of his own specially bound copy of the first edition (1892). It is this copy which bears the inscription: "PRIVATE COPY. May all the curses of the good Bishop Ernulphus light on the borrower-and-not-returner or upon the stealer of this book."

The heavy part of the work was done in the summer months, and in Baltimore, too, and the snapshots which accompany Osler's notes show him at his desk, in his shirtsleeves, which, as Dr. H. A. Lafleur has remarked in his reminiscences of Sir William, will be immediately understood by anyone who has spent a summer in Baltimore. Dr. Hunter Robb, who lent Osler his sitting room to work in, has told us how "oftentimes right in the middle of his dictating he would stop and rush into my other room, and ask me to match quarters with him, or we would engage in an exchange of yarns. It was a great treat for me, and except when he would court inspiration by kicking my waste-paper basket about the room, I thoroughly enjoyed his visits." The unfortunate receptacle he eventually left

in peace, but only after it had been carefully weighted with concealed bricks. But in spite of the heat Osler concludes:

> During the writing of the work I lost only one afternoon through transient indisposition and never a night's rest. Between September, 1890, and January, 1892, I gained nearly 8 lbs. in weight.

The book has undergone a great many changes since the first edition, as all good textbooks must. This has meant much careful selection and pruning to prevent its becoming unwieldy, and so one occasionally finds in the earlier editions matter which one would have liked to see retained. For example, in speaking of the spread of tuberculosis, he shows how apt this is to take place between husband and wife. "Weber's cases" he says, "are of special interest. One of his patients lost four wives in succession, one lost three, and four lost two each." But these modern Bluebeards are not mentioned after the sixth edition. The 7th edition, too, is the last to include the comment: "From the days of Mephibosheth, infantile paralysis has been attributed to the carelessness of nurses in letting the children fall."

It was seldom, however, that he took out the classical or biblical allusions. His simile between the development of tuberculosis and the parable of the Sower is retained in the latest edition, although in the 8th edition he speaks of it as "somewhat hackneyed:"

> The ultimate result in a given case depends upon the capabilities of the body to restrict and limit the growth of the bacilli. There are tissue-soils in which the bacilli are, in all probability, killed at once—*the seed has fallen by the wayside.* There are others in which a lodgment is gained and more or less damage done, but finally the day is with the conservative, protecting forces—*the seed has fallen upon stony ground.* Thirdly, there are tissue-soils in which the bacilli grows luxuriantly . . . and the day is with the invaders—*the seed has fallen upon good ground.*

In almost every edition the number of such allusions is added to. In the second edition, for example, he refers to the cure of hiccough recommended by Plato:

> Readers of Plato's Symposium will remember that the physician Eryximachus recommended to Aristophanes, who had hiccough from eating too much, either to hold his breath (which for trivial forms of hiccough is very satisfactory), or to gargle with a little water; but if it still continued, 'tickle your nose with something and sneeze, and if you sneeze once or twice even the most violent hiccough is sure to go.' The attack must have been of some severity, as it is stated subsequently that the hiccough did not disappear until Aristophanes had resorted to the sneezing.

Also, in his chapter on gout, he says:

> A common gouty manifestation upon which Duckworth has laid stress, is the occurrence of hot or itching feet at night. I notice in Plutarch that Strabo called this symptom 'the lisping of the gout.'

In the 8th edition, referring to smallpox, he writes:

> For centuries attempts have been made to modify the course of the pustules (of smallpox) by either excluding the light or modifying its character. In the Middle Ages, John of Gaddesden recommended wrapping the patient in red flannel, and treated in this way the son of Edward I. It was an old practice of the Egyptians and Arabians to cover the exposed parts of smallpox patients with gold leaf.

> For centuries it had been a popular belief among farmer folk that cowpox protected against smallpox. The notorious Duchess of Cleveland, replying to some joker, who suggested that she would lose her occupation if she was disfigured with smallpox, said she was not afraid of the disease, as she had a disease that protected her against smallpox . . . When Jenner was a student, a young girl who came for advice, when smallpox was mentioned, exclaimed, 'I cannot take that disease, for I have had cowpox.' Jenner subsequently mentioned the subject to Hunter, who in reply gave the famous advice: 'Do not think, but try: be patient, be accurate.'

Speaking of the treatment of coughing up of blood, he says:

> Rest of the body and peace of mind—'quies, securitas, silentium' of Aretaeus—should be secured . . . As Aretaeus remarks, in haemoptysis (blood spitting) the patient despairs from the first, and needs to be strongly reassured.

The latter sentence, however, was rather different to what he first thought of putting in, as shown by his pencilled note in the working copy of the third edition, which reads: "Aretaeus says that in haemoptysis the patient despairs from the first, but in consumption he flatters himself with hope of recovery to the last." To the modern medical man haemoptysis and consumption usually go together, whilst Aretaeus obviously drew a distinction between them; but the dying consumptive flattering himself with hope of recovery is still to be seen in any tuberculosis clinic.

Tuberculosis was a "pet" subject with Osler—as much as that title of endearment can be applied to anything so grim: it was "Captain of the Men of Death, as Bunyan calls it." He made great play with this when he attended the British Congress on Tuberculosis as representative from America:

> "The captain," he said, "had nevertheless been reduced to a lieutenant and would soon be reduced to the ranks, although it was almost too much to expect that he would be actually drummed completely out of the regiment."

Osler's writings inevitably remind one of Macaulay's, with their stream of allusion to classical and historical literature. One young doctor wrote Osler in despair because of the many allusions in "Aequanimitas" which he could not understand—and received a full reply to all his questions. These allusions provided a feature which inevitably was made fun of, and in due time an "examination paper" on the textbook appeared, in which even Osler himself admitted that he would not have made full marks. All the questions were on points dealt with in the book (the 4th edition), and their answers called for a very intimate acquaintance with it. One question was: "What internal evidence is there that Osler had had an unhappy experience with cheap bicycles?" It was this query that Osler could not answer; but it was pointed out to him that the answer lay in a remark he had made about the diseases of arteries, a tendency to which in some families could only be explained by the fact that "in the make-up of the machine bad material was used for the tubing."

Those who, through intimate acquaintance, might have passed the examination, will probably remember two passages in particular in which Osler's warmth of feeling was allowed full expression, although there are others not far behind them. In the first of these, he is dealing with the question of protective measures against venereal disease. After pointing out that the State has accepted responsibility for guarding citizens against smallpox or cholera, he goes on to say:

> The choice lies between two evils—licensing, even imperfectly carried out, or widespread disease and misery. If the offender bore the cross alone, I would say, forbear; but the physician behind the scenes knows that in countless instances syphilis had wrought havoc among innocent mothers and helpless infants, often entailing life-long suffering.' It is for them he advocates protective measures.

This passage, however, is found only in the first three editions. The second passage is a condemnation of the work of one Sanarelli in connection with yellow fever. He says:

> The work of Sanarelli has been marred by a series of unjustifiable experiments upon men, which should receive the unqualified condemnation of the profession. In one sense, every dose of medicine given is an experiment, since who can tell the nature of the reaction? But the limitation of deliberate experimentation on human beings should be clearly defined. Voluntarily, if with full knowledge, a fellow-creature may submit to certain tests and trials, just as a physician may experiment upon himself. Drugs, the value of which has been carefully tested on animals (if found harmless) may be tried on patients, since alone in this way can progress be made. But deliberate experiments such as Sanarelli carried out with cultures of known and tested virulence, and which were followed by serious, nearly fatal, illness, are simply criminal.

By the time the next edition came out, however, it had been found that Sanarelli's work was inaccurate, and no further notice was taken of it.

Some of Osler's additions and recasting of sentences are worth noting. He devotes a chapter to obesity, for example, which at first he speaks of merely as "An excessive development of bodily fat." In the 3rd edition, this is enriched by the qualification—" 'an oily dropsy,' as Byron termed it." In the next edition, he adds the comment: "An extraordinary phenomenon seen occasionally in excessively fat young persons is an uncontrollable tendency to sleep." And then, in the 6th edition, like the final triumphant chord in a fugue, he completes it with, "like the fat boy in Pickwick."

Again, under whooping-cough, he alters the sentence: "Children are usually terrified at the onset and run at once to the mother or nurse to be supported during the attack," to "The child knows for a few moments when the attack is coming on and tries in every way to check it, but failing to do so, runs terrified to its mother or nurse to be supported, or clutches anything nearby."

Further on, in the same chapter, he wrote the following note in the working copy of the 5th edition, the words here shown in italics being first written in and then struck out:

> We may say to-day with Willis that 'it rather cures by change of the season than is extinguished by remedies.' Old women and empirics, as he remarks, are as often consulted as physicians. *The truth is, the only sure remedy is six or eight weeks*, and there is no disease which illustrates more painfully the futility of our therapeutic efforts. Six *or eight* weeks, a big bottle of paregoric, and a watchful nurse or mother, are the essentials.

As often happened, however, he did not use this, and what actually appeared in the 6th edition was:—"If asked the two most important things, I should say, six weeks and a good big bottle of paregoric," and even this was taken out in the 9th edition.

On the subject of appendicitis, his notes for the 2nd edition read: "Through the pernicious influence of the daily press appendicitis has become a fad, and it has become an important duty of the physician to stand between the patient and the knife."

But in later editions he modifies this to read: "The physician has often to deal with patients who have a sort of fixed idea that they have a disease." In case the impression should be gained from this that he was criticizing the surgeons, it should be added that he puts in the remark: "The general practitioner does well to remember, whether his leanings be toward the conservative or the radical methods of treatment, that the surgeon is often called too late, never too early."

In the chapter dealing with mental disorders he had up to the 8th edition a section on "Faith Healing," which he then altered to "Psychotherapy," in accordance with modern usage. The opening paragraph of this reads:

> Hypnotism is rarely indicated. Carefully practised suggestion is most helpful and the psycho-analytic method of Freud may be tried. The use of religious ideas and practices may be most helpful, and this has come into vogue in various forms, as Christian Science, Emmanuelism, Mental Healing, etc. It is an old story.

And then comes the sonorous, almost liturgical passage which he had at first and which has been preserved in every edition:

> In all ages, in all lands, the prayer of faith, to use the words of St. James, has healed the sick; and we must remember that among the Aesculapian cult, the most elaborate and beautiful system of faith healing the world has ever seen, scientific medicine took its rise. As a profession, consciously or unconsciously, more often the latter, *faith* has been one of our most valuable assets, and Galen expressed a great truth when he said 'He cures most successfully in whom the people have the greatest confidence.' It is in these cases of neurasthenia and psychasthenia, the weak brothers and the weak sisters, that the personal character of the physician comes into play, and once let him gain the confidence of the patient, he can work just the same sort of miracles as Our Lady of Lourdes or Ste. Anne de Beaupré. Three elements are necessary: First, a strong personality, in whom the individual has faith—Christ, Buddha, Aesculapius (in the days of Greece), one of the saints, or, what has served the turn of common humanity very well, a physician. Secondly, certain accessories—a shrine, a sanctuary, the services of a temple, or for us a hospital or its equivalent, with a skilful nurse. Thirdly, suggestion, either of the 'only believe,' 'feel it,' 'will it' attitude of mind, which is the essence of every cult and creed, or the active belief in the assurance of the physician that the precious boon of health is within reach.

There was one unexpected repercussion from the textbook which is to be found in a clipping from an osteopathic journal of the day, preserved in Sir William's own copy of the third edition. The writer has seized on the point that the book does not advocate the use of drugs to the extent then customary, and jubilantly begins:

> The Osteopathist believes that the internal administration of drugs is useless . . . It is therefore with very great pleasure that he finds his heavy contention (*sic*) . . . supported by one of the best and most recent of the regular, orthodox, allopathic medical books. Osler deprecates the drugging propensities of the profession, and has reached the great success attained by him upon hydrotherapy, hygienic surroundings, etc.
>
> How much better he might have done under Osteopathic practice, he, perhaps, will never know.

Sir William must have had a good deal of fun out of his book in one way and another, but few things can have seemed more deliciously naive than that last sentence.

No single book in modern medicine has had a wider influence on medical thought and endeavour. There was one specially noteworthy influence with which it is credited, and that was its helping to bring into existence the Rockefeller

Institute of Medical Research. In the summer of 1897, a copy of the book came into the hands of Mr. F. T. Gates, a member of Mr. J. D. Rockefeller's philanthropic staff, and he was so attracted by it that, with the aid of a medical dictionary, he read it from cover to cover; "Having once started, I found a hook in my nose that pulled me from page to page."

In the psychological jargon of to-day, he had "a reaction" to the book:

> I saw clearly from the work of this thoroughly enlightened, able and honest man, perhaps the foremost practitioner in the world, that medicine had (with a few exceptions) no cures, and that about all that medicine up to 1897 could do was to suggest some measure of relief, how to nurse the sick, and to alleviate in some degree the suffering . . . I made a list—and it was a very long one at that time, much longer than it is now—of the germs which we might reasonably hope to discover but which as yet had never been, with certainty, identified; and I made a longer list of the infectious or contagious diseases for which there had been as yet no cure at all discovered.
>
> When I laid down this book I had begun to realize how woefully neglected in all civilized countries, and perhaps most of all in this country, had been the scientific study of medicine . . . It became clear to me that medicine could hardly hope to become a science until it should be endowed, and qualified men could give themselves to uninterrupted study and investigation, on ample salary, entirely independent of practice. . .
>
> Here was an opportunity for Mr. Rockefeller to become a pioneer . . . I knew nothing of the cost of research; I did not realize its enormous difficulty; the only thing I saw was the overwhelming and universal need and the universal promise, world-wide, universal, eternal.

And then he tells how he took his copy of Osler's book to his office and dictated a memorandum for Mr. Rockefeller, in which he tried to show the actual condition of medicine in the United States and the world as disclosed in the book:

> I enumerated the infectious diseases and pointed out how few of the germs had yet been discovered and how great the field of discovery; how few specifics had yet been found and how appalling was the unremedied suffering . . . I pointed out the fact, first stated by Huxley, I think, that the results in dollars or francs of Pasteur's discoveries about anthrax and on the diseases of fermentation and of the silkworm had saved for the French nation a sum far in excess of the entire cost of the Franco-German war . . . even if the proposed institute should fail to discover anything, the mere fact that he, Mr. Rockefeller, had established such an institute of research would result in other institutes of a similar kind . . . and that out of the multitudes of workers we might be sure in the end of abundant rewards. . .
>
> These considerations took root in the mind of Mr. Rockefeller and, later, of his son. Eminent physicians were consulted as to the feasibility of the project, and out of the wide consultation the Rockefeller Institute of Medical Research came into being.

To Mr. Gates, then, we must give very high marks for his study of the textbook, even though he was thinking mostly about what it did *not* contain! It stimulated him to great visions of what preventive medicine could do (visions which fortunately were shared by Mr. Rockefeller), because it was the writing of a man who not only was an enthusiastic master of his subject, but was able to transmute its ordinary cold and repellent aspect into one of warmth and lively interest.

The Graduates' Society and Its Work

By H. M. JAQUAYS, *President*

[NOTE—*The following article has been written by the President of the Graduates' Society, outlining the work of the Society and its relationship to the University.*

That the ideas expressed in this review are endorsed by the Principal is shown by the following note which we have received from Sir Arthur Currie.]

FOREWORD

I have read with interest and approval the article appearing in this issue of *The McGill News* from the pen of the President of the Graduates' Society of McGill University—Mr. Homer Jaquays, M.Sc., M.A. '99. I wish all graduates of our University were as keenly interested in her welfare as Mr. Jaquays. I have often sought his advice and found it sane, helpful, and cheerfully given.

Because we are a national institution our constituency ranges far and wide, and for that reason it is all the more difficult to get the full force of McGill opinion effectively behind any project.

In the lives of all of us there are a few mountain tops, a few things that stand out more prominently than all the other experiences, a few things we reverently cherish. I am sure that in the hearts of the graduates of McGill, their Alma Mater is one of the mountain tops. Their continued interest in her welfare is one of her chief sources of strength.

A. W. CURRIE

FROM time to time there comes to the attention of those who are closely connected with the Graduates' Society of McGill University indisputable evidence of a lack of knowledge on the part of graduates regarding the work of the Society, the relationship existing between it and the University, and what it has accomplished in the past; while expressions as to what the Society should do, now and in the future, exhibit a lack of unanimity that is disconcerting to those who are attempting to carry on the work of the Society.

In view of the fact that a Reunion of graduates is shortly to take place, the present appears a proper time to review these matters and to point out to the graduates the lines upon which their Executive is working.

Occasionally we hear the criticism that the Graduates' Society has accomplished little in the past and is accomplishing little at the present time. These are matters on which everybody has a right of opinion, but we believe that before giving judgment a full knowledge of the facts should be obtained, and concerning the present, what is being attempted should be recognized.

No comprehensive grasp of these matters can be obtained without reviewing briefly the history of the University and of the Society. In the first place, we must

keep in mind that, although we have had our Centenary, McGill is not really an old university, as it was not until Sir William Dawson was appointed Principal in 1855 that the University really began to take an important place in the life of the country and to turn out graduates in any considerable number. Before that time, those interested in educational matters in the Province of Quebec had had rather an uphill row to hoe.

Previous to 1801, when the Royal Institution for the Advancement of Learning was established by an Act of the Legislature, there were no free schools in the Province, and notwithstanding the passing of the Act, it was not until 1818 that School Trustees were appointed. We are told that the first schools were one-room buildings of cedar logs; that in 1819 the total expenditure for education was £883.10.0., and that the average salary of a teacher was £18.0.0. per annum.

I mention the Royal Institution for the Advancement of Learning because it supervised the establishment of McGill and directed the College in its infancy, for under the Act of 1801 all property and money given for educational purposes in the Province of Lower Canada were placed under the Institution's control.

It was at this time, when educational facilities in the Province were so limited, that McGill came into existence. James McGill's will was made in 1811. He bequeathed to the Royal Institution for the Advancement of Learning, in trust, the sum of £10,000 and his Burnside Estate of 46 acres, on the condition that "McGill College" be established within 10 years of his death, which occurred in 1813.

Montreal, at that time, was a city of from 12,000 to 15,000 inhabitants, the majority being French. In the year of James McGill's death, only 9 vessels entered Montreal from the sea, and these had a total carrying capacity of only 1,589 tons.

Under such circumstances, it can readily be seen that if McGill College had opened its doors immediately after Mr. McGill's death there would not have been a great many students. But the work did not commence at once, for there was much litigation with the heirs, and matters were not finally settled until 1837. Previous to that date, however, a certain amount of educational work had been carried on.

It is interesting to note that, during this long period, McGill was extremely poor. There was great difficulty in meeting the necessary expenses of the lawsuit. Some of the property was leased on a profit-sharing basis to a farmer, and in this connection considerable disturbance was caused by the fact that a fence had to be built to keep the cattle from straying, and there was no money for the purpose. However, as a result of an appeal to the Board of the Royal Institution, £75.0.0. was finally granted to pay for the fence.

These facts are mentioned to show that, up to 1837, there was not a great deal of progress made by McGill, and, as previously mentioned, the same condition prevailed up to the time of Sir William Dawson's appointment to the Principalship in 1855. It is apparent, therefore, that for many years after the foundation of McGill, the Governors were continually struggling to get enough money to carry on their work in any manner at all. Nor should we consider, so far as actual turning out of graduates is concerned, that McGill is as old a university as is popularly imagined, as up to 1855 the total number was only 180.

However, although McGill has always been poor financially, she has been fortunate in other ways. She was fortunate in the tolerant outlook of her first

benefactor, James McGill. He was the son of Scotch Presbyterians, attended Anglican service in a church lent by the Recollet Brothers, and married a widow—a Roman Catholic. With such a founder, as might be expected, the early Governing Body formulated most tolerant rules and regulations. McGill is also fortunate through being a private university, untrammelled by political influence. She is fortunate, too, in her location, which causes her to be influenced by, and to draw her students from, two great races with different cultural developments—and in the number of citizens who, though not university men, have realised the importance of such a cultural centre in the Province of Quebec, and have given generously of their wealth for her support.

From such modest beginnings, McGill has now expanded into an Institution with great influence upon national affairs. She owes her origin to the munificence of one man. In the early days, her welfare was the concern only of those closely connected with her. Later, she received the support of certain wealthy citizens who, as I have just said, though not graduates of the University, realised the necessity of such an educational Institution. The time has now arrived when the University can no longer rely entirely upon the generosity of a few benevolent friends, but must look more and more to her graduates for support, not only for financial support, but for the upholding of McGill traditions and ideals in the eyes of the public. Esteem by the public is perhaps the greatest asset that a university can possess, and if this is of value to the University, it is of still greater value to the graduates who hold the University's degrees. When graduates show that they consider invaluable the training received at McGill—are loyal to McGill and ever ready to help her—then, whether or not they are in a position to contribute money, they are contributing to one of the University's most precious assets. If the graduates do not perform this work for the University, they cannot expect the public to assume the duty, or, I should say, the privilege, they neglect. The product of McGill is her graduates. They, mixing in all branches of public life, can perhaps best appreciate whether or not the product of the University is best satisfying the demands of the time. Consequently, their constructive criticism and interest in the University should be of the greatest value in improving the usefulness of the product.

McGill's history, therefore, may be divided into three periods:—

1st. When she relied upon the benefactions of one man for support;
2nd. When she relied for support upon the few wealthy friends who contributed liberally to her maintenance and growth;
3rd. The period, entered upon in 1921, when McGill made her general appeal for support to her graduates and the public.

The appeal mentioned above was a recognition of the fact that McGill had grown too large to be cared for by a few individuals; that she had reached a position of national importance, and that if she was to grow and take care of the ever-increasing number of students knocking at her doors, she must have the sympathetic support of her graduates, and through them of the public in general.

The function of the Graduates' Society is to assist the University in the manner described above. The Constitution of the Society states:—

> The object of the Society shall be to advance the interests and promote the welfare of the University and its graduates, and to bind both the graduates and non-graduates more closely to their Alma Mater and to one another.

These, then, are the objects of the Graduates' Society. Is the Society attaining them? This is a question which we think should be considered at this time when the Graduate Body's attention is drawn to McGill as a result of the publicity attendant upon preparations for the forthcoming Graduates' Reunion.

The original McGill University Society was organized between the years 1850 and 1860. In 1876, the Graduates' Society of McGill University was founded, and in 1880 was incorporated. Previous to that time, as has been noted, McGill and the number of her graduates were small, and substantial assistance from the Graduate Body could not be expected. Conditions in Canada were primitive. Sir William Dawson, when he made his first visit to Toronto to ask for funds to carry on his work, relates that he crossed the St. Lawrence in a canoe, and that, as there was no direct communication by rail between Toronto and Montreal, he had to travel by way of Albany, Niagara and Hamilton, the journey occupying five days.

In 1876—the year in which the Graduates' Society was founded—a collection for a Library Fund was begun, as the Library was in great need of books, and without an income with which to purchase them. The income from the capital so collected has been devoted ever since that time to the purchase of books. The first payment was made to the Library in 1878.

To commemorate the 25th anniversary of Sir William Dawson's appointment to the Principalship, a fund was started in 1880 for Sir William, but he, considering that the needs of the Library were great and that books were the essential instrument of the educationalist, asked that the income from this sum be devoted to the purchase of books for the Library. The annual income from these two sums amounts to a little more than $500, and for years this amount, derived from the graduates' contributions and expended in books, has been of great benefit to the professors and students of McGill.

The Graduates' Society was instrumental in making available to students in the University the Stadium, built on land given to the University by Sir William Macdonald. The building and maintenance of the new Stadium were guaranteed by a group of graduates, and Capt. Percival Molson, who was killed in action in France, and was an officer of the Graduates' Society, left a bequest of $75,000 to the Stadium, which, since that time, has borne his name.

In 1919, the Constitution of the Society was revised, and an attempt was made to form more Branch Societies in Canada and the United States. As a result of the changes in the Constitution, the Board of Governors extended to the Graduates' Society the privilege of electing three representatives on that Board, in addition to the long-standing representation of the Society on Corporation and the more recent representation on the Athletic Board and the Advisory Board of the Students' Council.

The relationship, therefore, of the Graduates' Society to McGill University, and the carrying on of the work of the Graduates' Society, as it is being done at present, only dates from the year 1919, and as a result of these appointments the Graduates' Society, through its representatives, is now brought into close contact with those controlling the numerous activities of the University.

As the year 1921 was the Centenary of the granting of the Charter to McGill, a campaign to raise funds was undertaken in 1920, and 2525 graduates contributed a total of more than one million dollars.

Two years later, it was thought that if some special object were named, for

which the graduates could work, greater interest in the affairs of the Society would be taken by graduates in general, and with this end in view the Endowment Fund was started.

The original plan was to ask each graduate to give yearly to the Endowment Fund one dollar for every year that had passed since his graduation, until a maximum of, say, $25 was reached, although, so far as is known, no larger sums were ever refused. The plan was subsequently changed, and contributions of any amount, however small, are now cordially welcomed. The result of efforts to establish and increase the Endowment Fund has not been entirely successful, as contributions have been confined to comparatively few (518 in 1931), though these have given generously year after year. Yearly collections have varied from $6,000 to $10,000, with a grand total of $59,244 to date. It is to be regretted that interest in the Fund is not more widespread, for it is of more benefit to the University that one hundred men should give one dollar each than that one man should give one hundred dollars.

This Fund is administered by a Board of Trustees, seven of whom are appointed by the Graduates' Society, and five by the Board of Governors. It has been agreed up to the present that the principal of the Fund should not be touched, and that only the income should be expended. Up to this year, no use had been made of the income, which was considered too small to accomplish anything worthy of note. This year, however, it was decided to use the income to establish the McGill Graduates' Lectureship. The plan is that each year a man of outstanding ability shall be asked to live at McGill for a month, or six weeks, and deliver a number of lectures, which are to be free to students, professors, graduates, and all who wish to attend. This is along the lines of the Gifford Lectures of the Scottish Universities and the Hibbert Lectures of Oxford and London. Professor W. G. S. Adams, of All Souls' College, Oxford, delivered the first course of lectures in March and April, 1931, and arrangements for further lectures, or for whatever other use of the Fund is considered advisable, will be announced in due course.

So far as membership is concerned, the Graduates' Society of McGill University does not compare badly with other universities, notwithstanding the fact that our graduates are scattered over a huge territory. The last figures that we had compiled showed that there were—

Living Degree Holders	10,098
Living non-graduates (former students)	4,381
Graduates holding membership in the Society	3,321
Non-graduate past students holding membership	136
Total of graduates and non-graduates holding membership in Graduates' Society	3,457
Percent graduate members of all graduates	32.9

This cannot be considered a bad record, though constant steps are being taken to make it better.

Since revision of the Constitution of the Society in 1919, a special effort has been made to keep the graduates more closely in touch with University matters. A permanent Executive Secretary has been in charge of the Graduates' Society's affairs, and *The McGill News* has been published quarterly. The *News* is really the best medium by which graduates can get information in regard to University

matters, and its usefulness will increase as time goes on, for the University authorities are using it more and more as a means of communicating with the Alumni.

For the past few years, a special effort has been made to encourage all members of the graduating classes to join the Society before Convocation. Membership fees for the first year and a half are paid out of the caution money, and in this way the Society has been successful in recruiting a high percentage of new graduates to its ranks.

This year, with the help of the Federal and the Provincial Governments, the Society has engaged the services of one person to assist graduates in obtaining positions. Though, owing to the small amount of funds available, it is obligatory that this work be carried on in a modest manner, the arrangement furnishes means of contact between outside employers and our graduates. This work is done quietly but continually, and the result has been the placing in responsible positions of a considerable number of graduates. Under to-day's conditions, it is needless to point out that those who have received this assistance from the Society have expressed themselves deeply indebted to us for the efforts made on their behalf.

In concluding this brief summary, it is essential to point out that the activities of the Society, and the work that it can do, depend largely upon its finances.

The annual subscription for members, including the official publication, *The McGill News*, is only three dollars. Where the member is also a member of a Branch Society, one dollar of this subscription is handed back to the Branch Society.

It is at once evident, from the figures given in the foregoing, that the work of the Society and its various activities must be restricted. If fifty per cent. of our graduates were members of the Society, much more could be done for the University and for the graduates. Undoubtedly the interest of graduates is stimulated through the efforts of the Society, and by the information concerning McGill that is afforded. We have now eighteen active Branches, over 3,000 members, and living degree holders numbering approximately 10,098. To keep so large a body in touch with the activities of the University demands a very considerable expenditure. We have about one dollar per graduate with which to carry on the work.

Your Executive, however, feels that we have a great and essential work to do in maintaining the interest of our Body, and the public in general, in the affairs of the University. We feel it is the duty of the graduates to give what financial assistance they can to the University, to extend her good name, to extol her merits, and to assist in spreading knowledge of the great work the University is accomplishing. It is one of the functions of the Society to bring home to all graduates these facts, together with the thought that McGill belongs a little more to them than to any other Body.

To us particularly, as graduates, accrues the privilege of caring more deeply and working more effectively than others for the welfare of our Alma Mater. If we can secure a general recognition and appreciation of this fact, there is no fear but that McGill, with her fine traditions, will do for our children and our children's children, in an ever-increasing degree, that which she has done for us.

(Note:—The historical matter concerning McGill in this article has largely been taken from "McGill and Its Story—1821-1921" by Cyrus Macmillan; John Lane, publishers.)

Book Reviews

WHEN a man who has in turn been an engineer, newspaper reporter, sports writer, parliamentary press correspondent, editor, and newspaper owner, gathers into a volume the reminiscences of a long and active life, the resulting book is almost certain to contain material of more than passing interest. Beyond doubt, this can be said in regard to *Retrospects of a Newspaper Person* (Oxford University Press: Toronto: $2.00), published a few months ago.

In this volume, Philip Dansken Ross, B.Sc. '76, and, incidentally, captain of the McGill football team that played Harvard in that year, presents in ninety short chapters a wealth of incident and introduces to his readers a host of those who, in the realms of finance, government and sport, have been known to fame in Canada and abroad. As one turns the pages of Mr. Ross's book, prime ministers and prize-fighters, cabinet ministers and cub reporters, soldiers, statesmen, editors, athletes, and politicians make their bow, hold the stage for a moment or two, drop often for a confidential moment into the stage box where the reader feels that he is seated, and move on, to make way for whatever characters the author has chosen to succeed them.

And in the choice of the succeeding characters there are few hampering restrictions. A newspaper man meets all varieties of his fellow men, often on terms of highly incongruous intimacy, and accordingly through the pages of Mr. Ross's recollections there stalk knights and knaves, governors-general and shady politicians, high-minded statesmen and low-browed pugilists, each made welcome, provided he furnish the author's pages with some striking example of wit, humour, or character, or, perhaps, an equally notable absence of all three.

If a meticulous reviewer sought to criticize this book, it would not be unfair for him to say that typesetting errors are a shade too numerous, but, having made this charge, he would undoubtedly turn with satisfaction to those aspects of his subject in which his readers would be more deeply interested. He would note, for example, that the book he was reviewing was essentially masculine in its appeal—a man's book, written by a man for men. And he would quote delightedly, if space permitted, choosing possibly the tale of how young Sam Hughes, later a familiar figure in Canada's story, stood at the side of a strange lad in Toronto one day and loyally offered to join with him in knocking the heads off two roughs who were threatening him; or perhaps the story of how an investment of exactly nothing in cash and a minor courtesy in kind netted the author $127,032 in a short period of fifteen years; or any one of the scores of stories equally humorous or interesting.

Few books with so wide a range of human interest as *Retrospects of a Newspaper Person* have appeared in Canada in recent years. Mr. Ross has not winnowed all the chaff from the wheat, and occasionally a page contains a story lacking the humour or significance of those that follow and precede it, but such instances are rare and the book, as a whole, will delight the reader who wanders, amused and entertained, through its pages.

R. C. F.

In his *Seven Great Bibles* (Frederick Stokes Company, New York, $2.50), Alfred W. Martin, Arts '82, contributes to the World Unity Library a volume which is stated to "interpret the spirit of the new age" and to present "the first comprehensive attempt to introduce to the enlightened modern reader the sacred scriptures of other religions besides Christianity." The seven "bibles" to which the title refers are the sacred writings of Hinduism, Buddhism, Confucianism, Zoroastrianism, Modammedanism, Judaism, and Christianity.

Convinced of the essential unity of religion throughout the ages, Mr. Martin quotes extensively from the *Rig-Veda* and other scriptures of Hinduism, the *Pitakas* of Buddhism, the *Gathas* of Zoroastrianism, the five *Kings* of Confucianism, the *Koran* of Mohammedanism, and the *Old* and *New Testaments* of Judaism and Christianity. Similarities in the basic teachings of these holy literatures are skilfully presented, but the author has not succumbed to the temptation of pressing this point too far. On the contrary, he has noted where, in essentials, the precepts of the different volumes are, or seem to be, irreconcilable. "Too long," he writes, "has attention been confined to the resemblances in the teachings of the world's great religions. 'Tis time we took cognizance also of the differences."

In addition to discussion of the theologies of the seven religions, the author has presented summaries of historical circumstances relating to the modern discoveries of the scriptures themselves, and to the lives of those upon whose work, or teachings, the sacredness of the scriptures is founded. Beginning with the discovery of the *Koran* by a Spaniard, when in A.D. 711 the Moors crossed from northern Africa into Spain; continuing with the discovery of the Confucian and pre-Confucian scriptures by a group of Germans in approximately 1350, with the discovery of the Zoroastrian scriptures by du Perron, a Frenchman, in 1784, and with the discovery by the British of what is probably the oldest "bible" in the world, the Rig-Veda of Hinduism, about the end of the eighteenth century; the story of modern rediscovery ends with the finding of the three *Pitakas* of Buddhism.

In his study of these volumes, together with the *Old* and *New* Testaments, Mr. Martin has produced a scholarly work. The conclusions he reaches in many instances will not prove acceptable to the orthodox among those whose faith he is at the moment examining, but in his avowed desire to "let the seven great religions speak for themselves, through their sacred scriptures," he has been successful in presenting many aspects of the world's outstanding religions unfamiliar to western readers, other than those to whom such studies are a matter of professional concern. R.C.F.

The Rhodes Scholarships

By G. S. Stairs, K.C.

A VERY notable change has recently taken place in the personnel in charge of the administration of the Rhodes Scholarships. Sir Francis J. Wylie had been Oxford Secretary of the Rhodes Trust since the institution of the scholarships. He was the link between the scholars and their selection boards on the one hand and the authorities of Oxford University and its colleges on the other. For twenty-eight years he has seen Rhodes scholars come and go, and his friends include them all, and are scattered all over the world.

Two years ago Rhodes House was opened at Oxford. It is a fine building, erected by the Rhodes Trustees to serve as a residence for the Oxford Secretary and a meeting place in Oxford, not for Rhodes Scholars in residence, but for old Rhodes Scholars who may be revisiting it, and for meetings, lectures, and any useful purpose at the need of the University. Libraries are also housed there and it is hoped to make Rhodes House a centre for the study of questions of political science and economy relating particularly to the needs and future of our British commonwealth.

Professor C. K. Allen, lately Professor of Jurisprudence at Oxford, has succeeded Sir Francis Wylie as Oxford Secretary, and has also been made Warden of Rhodes House. He made an extensive tour during the winter and spring in Canada and the United States, in order to meet selection boards and old Rhodes Scholars in preparation for his new duties.

When in Montreal, Professor Allen remarked that he was anxious that one erroneous idea about the Rhodes Scholarships should be corrected. He referred to the belief which seems to be current, particularly among undergraduates in this country, that the opportunities afforded by the Rhodes Scholarships can be used to advantage only by students in Arts or Law.

This point had already received consideration by those interested in the scholarships in this country, and steps had been taken to obtain information about the facilities which were available to medical students.

Before dealing particularly with medicine, a few words on the scholarships generally may refresh the memories of some people and be new to others.

The Rhodes Scholarships owe their foundation to the farsighted generosity—indeed munificence is not too grandiose a term—of Cecil John Rhodes. Rhodes went to South Africa for reasons of health. In the intervals of work there he returned periodically to Oriel College, Oxford, and eventually completed his course there for a degree. This is not the place to describe how he became one of the Empire's foremost statesmen and one of its richest men. Throughout his career he meditated upon and discussed with friends his plans to devote his fortune to the good of his country and of the world. Draft after draft was embodied in will after will, until the plan was finally evolved.

Briefly, the plan as expressed in his last will was to collect for education at Oxford a body of young men drawn from the British Dominions and Colonies, the United States and Germany, in the belief that they would learn from their fellows at Oxford and from one another, and be a force for good in the world. Rhodes explained carefully that he did not want bookworms or prigs, but men in the full sense of the word. With that in view he directed that his scholars should have four groups of qualities, the first two of which he considered the most important:

(i) Literary and scholastic ability and attainments.
(ii) Qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness, and fellowship.
(iii) Exhibition during schooldays of moral force of character and of instincts to lead and to take an interest in his schoolmates.
(iv) Fondness for and success in manly outdoor sports such as cricket, football, and the like.

The best commentary on the above is to quote from instructions issued by the Trustees to Selection Committees:

(i) According to the Oxford system, the scholar is expected, in large measure, to educate himself. His success in his final (honours) examinations will depend not merely upon the amount of knowledge he has acquired but upon his ability to think constructively and critically for himself about the subjects he has studied, and to understand their relation to the other major aspects of human life and thought. It is important, therefore, that the student, in addition to the normal literary and scholastic attainments, should have active intellectual interests outside the field in which he proposes to specialize.
(ii) The moral qualities Mr. Rhodes required in his scholars seem to require no comment. It is interesting to note, however, the emphasis he laid upon the sympathetic and kindly qualities of true manhood.
(iii) 'Leadership' has come to acquire, especially in the United States, a somewhat special meaning which was clearly not in Mr. Rhodes' mind, namely, success in being elected to office in student organizations. This may or may not be evidence of leadership in the true sense of the word. Mr. Rhodes evidently regarded leadership as consisting in moral courage and in a real interest in one's fellow men. Resistance to student opinion, for instance, may give more evidence of leadership than success in interpreting or expressing it.
(iv) In a private letter about his will, Mr. Rhodes said that his scholars should "be moderately fond of field sports," rather than that they should attain "success" in athletics, in the sense of winning a university "letter" or a "blue." At Oxford all but a small minority of undergraduates play games of some kind. What Mr. Rhodes seems to have wanted was that his scholars should play some outdoor game sufficiently well to develop force of character and activity and health of body, to train them to 'play the game' in a sportsmanlike manner, and to make it easy for them to enter the social life of their college. He regarded the Colleges as places where friendships as opposed to mere acquaintanceships are made. Between two men both interested in sports it should not be assumed that the better athlete would be the better Rhodes Scholar.

The scholarships are now £400 a year, tenable for three years. Appointments are made in the first instance for two years, and scholars desiring a third year will be expected to present a definite plan of study satisfactory to their colleges and to the Trustees. The first two years must be taken at Oxford, but it is now possible, with the Trustees' approval, to take the third year at another university. The scholarship is barely sufficient to maintain a scholar through vacation time as well as at Oxford, and scholars who can afford to supplement it by £50 a year will find it advantageous to do so.

In Canada a candidate must be a British Subject with at least five years

domicile in Canada and must have passed his nineteenth but not have passed his twenty-fifth birthday on October 1st of the year *for* which he is elected. He must also have passed two years at a Canadian university by October 1st of the year for which he is elected.

As a general rule, candidates in Canada and the United States complete a university course before going to Oxford. It may be in Arts, it may be in Law or Medicine. That, however, is not required by the conditions. Students will be eligible for election if they will have completed two years of any university course that will enable them to obtain the necessary standards for admission to Oxford University by October 1st of the year that they enter Oxford.

This brings us to the point which it is specially desired to emphasize. No restriction is placed upon a Rhodes Scholar's choice of studies. He may read for the Oxford B.A. in any of the Final Honours Schools, which are established in the following studies, any *one* of which can be exclusively studied: Literae Humaniores, Mathematics, Physics, Chemistry, Animal Physiology, Zoology, Botany, Geology, Astronomy, Engineering, Science, Jurisprudence, Modern History, Theology, Oriental Subjects, English Language and Literature, Philosophy, Politics and Economics, Modern Languages. He may enter for one of the so-called Diploma Courses in special subjects, or if qualified by previous training may be admitted to read for advanced degrees, such as B.C.L., B.Sc., B.Litt., or D.Phil.

It is also the greatest mistake to think that Oxford does not offer excellent facilities for study in such subjects as science, mathematics, engineering, and the like. There may be difficulties in fitting in to the Oxford system so as to be useful in qualifying for its degrees work previously done in this country, but it is almost always possible, with competent advice, to find the way in which credit for partial courses here may be obtained.

However that may be, the fact remains that the Rhodes Scholarships offer a golden opportunity to any student with the necessary qualifications for six months in each year to reside in one of the most ancient and famous seats of learning in the world, where he can meet students from all over the English-speaking world in the intimate conditions of college life, and for the other six months to travel and study in any part of the British Isles or Europe.

The greatness of the opportunity calls for response by the best of our students and it has been and will continue to be most unfortunate that the choice should be restricted by the abstention of good men in the mistaken belief that they cannot find what they want at Oxford.

By way of illustration, the length of a medical course, stretching from perhaps five to seven years, as against the tenure of a Rhodes Scholarship, three years, immediately suggests a difficulty in fitting three years at Oxford into a medical course or in superimposing two or three additional years at Oxford upon a previously completed medical course.

Here is the judgment of Mr. H. F. Moseley, who has most successfully fitted three years at Oxford into a medical course commenced at McGill University and now being finished at London. The decision to finish in London was made during the Oxford course, but before leaving, Mr. Moseley, it is understood, had made arrangements to obtain credit at McGill for his Oxford work, so that his course might have been completed here had it not been possible to stay in London and take the Oxford degree.

St. Thomas' Hospital,
London, 10/2/31.

Dear Mr. Stairs:

I am taking the first opportunity to write you on the question of the facilities for Medical Rhodes Scholars in Oxford and how their three years can be best arranged. As one can readily see, the problem is complicated because of variations in the ability, the seniority, and the intentions of each student.

With reference to general information, one must consider the following facts: Each Rhodes Scholar, who comes to continue medical studies in Oxford, does an Honour School in either Animal Physiology or Comparative Anatomy. About ninety-nine per cent. of the students do the former, which is under the direction of Sir Charles Sherrington.

This School of Physiology is to me the finest course Oxford offers to the medical scholars, both from the point of view of mental development and of gaining a deep appreciation of scientific method and subject matter.

I think undoubtedly an Honour School is *the* characteristic feature of Oxford training and is *the* course to pursue, if one wishes to obtain the full advantage of the Oxford system.

The Anatomy Department is well equipped and the work is done very thoroughly. It is under the direction of Professor Arthur Thompson, who is ably assisted by Mr. P. N. B. Odgers.

The student spends a term of eight weeks in dissecting each part, and completes the dissection of the whole body in five terms, or two years. They thus only dissect the body once, whereas at McGill University, for example, the student makes two complete dissections of the body, extending over a similar period. I will not enter into a discussion of the relative merits of these two methods. It is in favour of the Oxford method that each student works alone on his part, whereas at McGill, two, three, or four may be at work on the same region simultaneously.

For the student who has completed the work, the honorary position of "student demonstrator" is available, and it is my belief that by this method one really gains the proper perspective of this interesting study.

The Departments of Pharmacology and Pathology, under the direction of Professors Gunn and Dreyer respectively, provide excellent training in these two subjects, which most students take after doing the B.A. in Physiology. These subjects, with clinics at the Radcliffe Infirmary, fill up a year very completely. The clinical work at the Infirmary is of an elementary nature, and gives one a good grounding in elementary medicine, surgery, and casualty dressings.

So much, then, for the general courses here. The next question is—how can the medical scholar fit these into his individual scheme to the best advantage? Here is where the difficulties arise, as the personal factors, previously mentioned, now enter the discussion.

One's course depends greatly on what the person intends to do after his three years in Oxford, i.e., whether he will return to his home university, or finish his studies in England, presumably for the Oxford qualification.

If the student is returning to the Dominions, Colonies, or the United States for his final clinical studies, he may consider the following points:

Most Rhodes Scholars obtain Senior Standing, which enables them to do the B.A. School at the end of the second year. The course of such students depends on the work they have already completed.

If they have taken a Bachelor's Degree in General Arts and nothing more, and wish to begin medical studies at Oxford, they will have to do the Natural Science subjects, Botany, Zoology, Physics, and Inorganic Chemistry, which will require the first year. I can only say that the more of these subjects the students are exempt from by taking appropriate courses in the home universities and *obtaining proper certificates to present to the Oxford authorities*, the easier things will be for them here. They may come over early and write off the examinations in this way.

Then, during the next two years, Anatomy and Physiology would occupy the time, and a fourth year would be required to do the work for the Physiology Final Schools, unless the Anatomy was omitted altogether and the second and third years were spent purely on Physiology. This question must certainly be decided in each case as it arises.

The student who best fits in his time in Oxford is the one who comes with exemption from the preliminary subjects in Natural Science and some knowledge of Anatomy and Physiology, together with his Senior Standing. He can thus spend a year in doing Anatomy and, if sufficiently advanced, consider the senior Physiology work for two years, writing the B.A. Schools at the end of his second year. Thus his first year would be Anatomy and Physiology—his second year purely Physiology. This is the usual routine for the English students. I am in favour of continuing the subject of Anatomy during the greater part of the second year in the case under consideration, if possible, as a student demonstrator. The third year would be spent in the subjects Pathology, Pharmacology, and Elementary Clinics. Some, however, spend their third year in taking a Bachelor of Science degree in the Physiology Department, which is an excellent experience. If one is interested in the practice of medicine or surgery such "research" might be omitted until one is a graduate in medicine with a broader outlook and felt a personal urge to investigate a particular problem; and this is the view which Professor Sherrington expressed to me on one occasion when I questioned him on the subject.

If the student then takes the Oxford examinations in these subjects, he will be able to return to his home university in the second year of the clinical work, which corresponds to the sixth year of the seven year course at McGill University.

If the student wishes to finish in London and take the Oxford B.M.Ch. B., it will require thirty-three months of hospital work, including the six for which he has credit from his third year in the Infirmary. He will also have to complete the Oxford examinations in Organic Chemistry, Anatomy, Physiology, Pharmacology, and Pathology.

In many cases the answer to the above question depends on the financial resources of the individual, because at the end of his three years he often finds himself without a source of revenue. It can be definitely stated that the Rhodes Trustees cannot assist medical students further in their course, and each one must arrange things for himself.

I may suggest Entrance Scholarships in the London hospitals and demonstratorships, especially in Physiology, but one requires more money than will be obtained from these sources. It costs approximately $1500 (£300) per annum to study in London.

A few words may be said regarding the choice of graduates in medicine as Rhodes Scholars. These often find difficulty "in going back" to such subjects as Anatomy and Physiology. Consequently they tend to go in for "research" degrees, for which it is often a question whether they are sufficiently well grounded. It is true Oxford offers exceptional facilities for research in the subjects Physiology, Pharmacology, Bacteriology and Pathology, in which the B.Sc. and D. Phil. degrees are available, but the laboratory work in these fields isolates one to the greatest possible extent from a large part of Oxford life. I would not go so far as to say that the students in question should be excluded from the Rhodes Scholarships, but in my opinion the Committee of Selection should be even maximally careful in their choice of the clinical man.

I may also add that the Rhodes Scholarship enables the student to visit the various medical centres such as London, Edinburgh and Continental cities, although this should not be done to such an extent as to detract from the wider ideals of his "Trust."

If I were suggesting colleges for medical scholars the following would be on the list: Balliol, Magdalen, Merton, New College, Oriel, St. John's, and University; and in selecting colleges, Balliol, Magdalen and New College, I would keep in mind, are more expensive to live in than the others, and that the medical student in Oxford has undoubtedly the highest fees to settle and some additional money besides the Rhodes grant would be necessary.

I am indebted to my friend A. J. Grace, Saskatchewan, 1927, for discussion on some of these points, and either he or I will be glad to render any assistance possible to the Committee or Medical Rhodes Scholars-elect.

Yours sincerely,

H. FRED. MOSELEY

In conclusion, on behalf of the Rhodes Trust and those who are charged in Canada with care of the affairs of the Rhodes Scholarships, may I express the heartiest thanks to *The McGill News* for this opportunity to remind its readers of the Rhodes Scholarships.

A McGill Man Honoured

By J. F. GALLAGHER, Med. '14

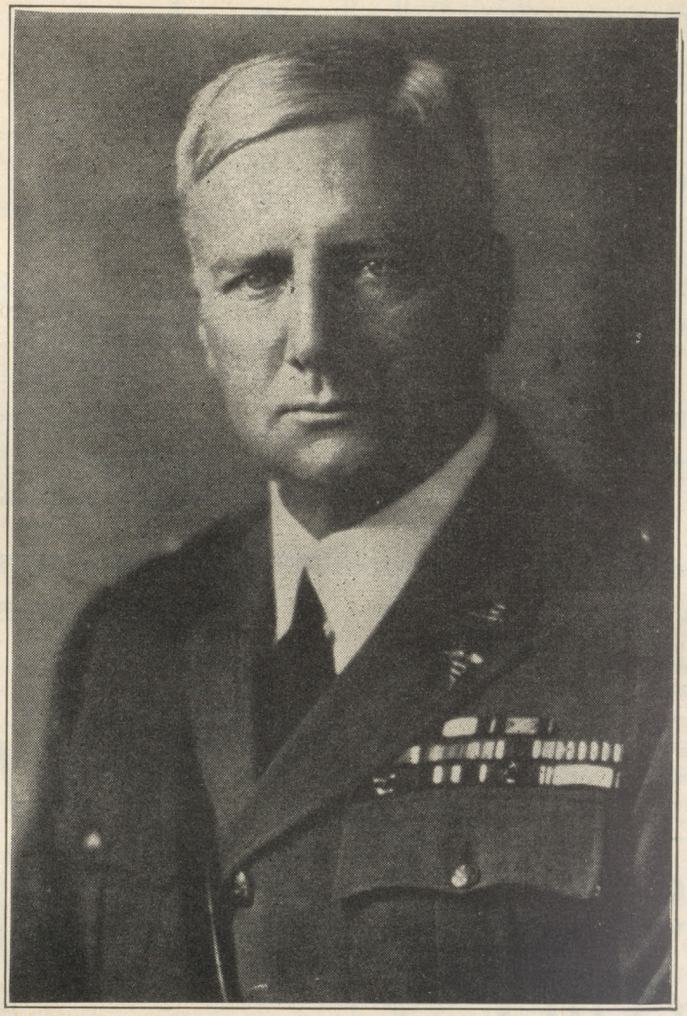
ON May 11, 1917, the *Saxonia* sailed from New York bearing a McGill graduate as Officer Commanding American Base Hospital No. 5. On the fourteenth anniversary of that event, the officer, Colonel Robert U. Patterson, was named Surgeon-General of the United States Army. This is the highest honour in the Medical Corps, and the appointment is made upon the recommendation of the United States Secretary of War, approved by the President, for four years from acceptance. So far as is known, this is the first time a McGill man has been appointed.

Robert Patterson was born in Montreal, on June 16, 1877, and is one of seven brothers, five of whom served as officers in the American Army in the World War. The family moved from Montreal to the United States, but General Patterson, when of college age, returned and graduated from McGill in 1898. He was appointed to the United States Army as Assistant Surgeon in 1901, and his first station was Fort McHenry, Maryland.

On May 5, 1917, after varied experience in the Philippines, in Cuba, and in San Francisco at the time of the earthquake and fire of 1906, also in many countries of Europe in the early days of the World War, General Patterson assumed command of Base Hospital No. 5, an organization distinguished as the first unit of the American Expeditionary Forces to have personnel killed by the enemy. This hospital was organized at Harvard University in February, 1916, and was inducted into service of the United States on May 7, 1917. The unit sailed May 11, 1917, and on reaching France was assigned to the British Expeditionary Force, as General Hospital No. 11, stationed between Dannes and Camiers, Departement Pas de Calais. On the night of September 4, 1917, five bombs caused the first casualties in the A.E.F., one officer and three men being killed and three officers wounded, two fatally. At the same time, one other rank of the Royal Army Medical Corps, on duty, and twenty-two British soldier patients were wounded. This hospital, which saw its entire service with the British, was one of the busiest hospitals in the A.E.F. From June 1, 1917, to January 1, 1919, it cared for 45,837 patients, receiving as many as 964 in a day, though normal capacity was 650.

General Patterson left this unit on February 27, 1918, and joined the American Military Mission to Italy. He was promoted to Lieutenant-colonel on May 15, 1917, and to Colonel, National Army, on December 17, 1917. He was awarded the American Distinguished Service Medal for exceptionally meritorious service, and was mentioned in despatches by Sir Douglas Haig. He also earned the Italian Service Ribbon and the Italian Order of the Crown.

In May, 1918, he was made General Medical Inspector of the A.E.F., and saw service with the Second American Division at Belleau Wood. In September, he was ordered to the United States as an instructor at the Army War College, where he remained until after the Armistice, serving subsequently in the United States and in Hawaii, whence he was recalled to Washington previous to his appointment as Surgeon-General.



MAJOR-GENERAL ROBERT U. PATTERSON, Med. '98
Surgeon-General, United States Army

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OCTOBER 14th TO 17th

Programme

WEDNESDAY, OCTOBER 14th:

Registration at Mount Royal Hotel.

Afternoon—Special Convocation for conferring honorary degrees on graduates.

Evening—Smoker for men. Meeting of the Alumnae Society and entertainment for women.

THURSDAY, OCTOBER 15th:

Morning—Clinics, Demonstrations, see buildings and hear lectures.

Afternoon—Golf matches. Opening of the new wing of the R.V.C., and tea.

Evening—Reunion Dance.

FRIDAY, OCTOBER 16th:

Morning—Special meeting of the Graduates' Society and address by the Principal.

Afternoon—Intercollegiate Track Meet.

Evening—Reunion Banquet for men, and Reunion Dinner for women graduates, and entertainment for other women by the McGill Women's Union.

SATURDAY, OCTOBER 17th:

Special Reunion Luncheon at Mount Royal Hotel.

Afternoon—Football game, Toronto vs. McGill.

Evening—Class or Fraternity Dinners.

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The Graduates' Society records with deep regret the deaths of the following Alumni:

AMES, DR. CALVIN ALFRED, Med. '02, in Toronto, July 6, 1931.

DE CEW, REGINALD M., B.Sc. '20, in Sumner, Washington, on April 6, 1931.

DEEKS, DR. WILLIAM EDGAR, Arts '89, Med. '93, in New York City, July 24, 1931.

DOHERTY, RT. HON. CHARLES JOSEPH, LL.D., Law '76, in Westmount, Que., July 28, 1931.

GREEN, DR. T. BENNETT, Med. '06, in New Westminster, B.C., on June 5, 1931.

HAGUE, FREDERIC, K.C., Law '83, in Montreal, June 11, 1931.

HUME, DR. WILLIAM LYMAN, Med '75, at Leeds, Que., June 28, 1931.

INTERNOSCIA, JEROME, Arts '93, Law '94, in Montreal, June 3, 1931.

JOSEPHS, DR. GEORGE EDWARD, Med. '81, at Pembroke, Ont., May 20, 1931.

MCLEA, ERNEST HOPE, Sci. '99, in Montreal, June 16, 1931.

MCPHERSON, FRANK H., past student, in Edmonton, Alberta, June 14, 1931.

MURRAY, ALFRED POLSON, Arts '87, in Montreal, June 14, 1931.

MURRAY, DR. LEONARD MILTON, Med. '00, in Toronto, August 8, 1931.

PITCHER, MISS WINONA JESSIE, Arts '96, in Rothesay, N.B., May 29, 1931.

PLACE, EDSON GRENFELL, K.C., Arts '98, Law '01, at Lakeside, Que., July 31, 1931.

ROWAT, DR. WILLIAM MCLEAN, Med. '86, at Athelstan, Que., June 18, 1931.

SADLER, THE REVEREND THOMAS A., Arts '93, in Armstrong, B.C., September 26, 1930.

VAN HORNE, RICHARD BENEDICT, Sci. '99, at St. Andrews-by-the-Sea, N.B., on August 20, 1931.

In a university as old as McGill, no quarter year fails to witness the deaths of a number of well-known graduates, and the period covered by this issue of *The News* provides no exception.

In the Faculty of Law, several men who have brought great honour to the University passed away, the number including the RIGHT HONOURABLE C. J. DOHERTY, K.C., P.C., former Dominion Minister of Justice, who, with Sir Robert Borden, was one of Canada's representatives at the Peace Conference of 1919; FREDERIC HAGUE, K.C. one of the best known practising lawyers of Montreal, noted for his keen interest in the welfare of the Conservative Party and in many phases of Empire development; EDSON G. PLACE, K.C., a prominent member of the Bar of the Province of Quebec, who had taken an important legal part in the formation of the United Church of Canada; and JEROME INTERNOCIA, who graduated in 1894, practised in Montreal, and died there on June 3rd.

In Medicine, too, the deaths reported have meant a serious loss to McGill. Early in July, DR. C. A. AMES, who at one time had practised in Newfoundland, had served overseas in the C.A.M.C., and later had practised in Newmarket, Ontario, died of heart failure in Toronto, where he was practising at the time; and, later in the month, DR. W. E. DEEKS died in New York. Dr. Deeks, who was one of the leading English-speaking authorities on tropical diseases, was gold medallist in Arts in 1889 and in Medicine in 1893. He served as Sir William Dawson's assistant in Zoology at McGill, practised in Montreal, and later was one of those instrumental, from a medical point of view, in assisting Col. Gorgas to build the Panama Canal.

In addition to the deaths of these well-known graduates, the Faculty of Medicine has suffered through the death of DR. GEORGE E. JOSEPHS, a senior physician of the Dominion, who graduated from McGill in 1881 and, after long and faithful service as a family doctor, with a special interest in the treatment of diabetes, died in Pembroke, Ontario, a few days after the last issue of *The News* was forwarded to the printers; and through that of DR. L. M. MURRAY, Vice-President of the McGill Society of Toronto, and noted heart specialist, who died of heart disease as he was dressing for dinner on the night of August 8th, and was found dead by his guest from overseas, the Right Reverend the Bishop of London.

Further deep loss was inflicted on the Faculty by the deaths of DR. W. MCL. ROWAT, Med. '86, who for many years had served as coroner of the District of Beauharnois and as an influential member of the Protestant Committee of Public Instruction; and of DR. WILLIAM LYMAN HUME, who graduated from McGill fifty-six years ago, and died at Leeds, P.Q., on the twenty-eighth of last June.

In association with Law and Medicine, the other Faculties of the University have lost a number of fine graduates, Arts deploring particularly the death of ALFRED P. MURRAY, Assistant Managing Director of the Canada Starch Company, who, in addition to business duties and widespread participation in the promotion of Empire unity, had served with great devotion as Chairman of the Graduates' Society Endowment Fund. E. H. MCLEA also died in Montreal, and from both extremities of Canada losses were recorded, news being received from British Columbia of the death in September, 1930, of the REVEREND THOMAS A. SADLER, Arts '93; and from New Brunswick that MISS WINONA JESSIE PITCHER, Arts '96, had died in Rothesay on the twenty-ninth of May.

In addition to the loss of graduates, the University learned with regret that a past student, F. H. MCPHERSON, Telegraph Editor of the Edmonton *Journal*, had died in Edmonton, after a brief illness, on June 14th. Two letters received just before this issue of the *News* is forwarded to the printers also bring tidings which the University deeply deplores, one stating that REGINALD M. DE CEW, of Fibreboard Products Inc., had died, following an operation for appendicitis, on April 6th last; and the other that DR. T. BENNETT GREEN, President of the Medical Class of 1906, had died in New Westminster, B.C., on the fifth of June. The report was also received of the death of R. B. VAN HORNE, only son of the late Sir William Van Horne, former President of the Canadian Pacific Railway Company, which occurred at his summer home at St. Andrews-by-the-Sea, N.B., on August 20th.

MAJOR D. STUART FORBES, M.C., B.Sc., B.ARCH.
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University News and Notes

Canadian Medical Achievement Reviewed

In the August number of *The Canadian* magazine there appears, under the title "Makers of Miracles," a most interesting article by Beverley Owen on Canadian achievement in medicine and surgery. Many McGill men are introduced to readers of this article, the number including Dr. E. W. Archibald, Chief Surgeon of the Royal Victoria Hospital, Montreal, whose outstanding work in thoracoplastic surgery is described; Dr. I. M. Rabinowitch, of the Montreal General Hospital, whose discovery of a formula now widely used in the treatment of goitre is detailed; Dr. J. B. Collip, Chairman of the Department of Biochemistry, whose work on the parathyroid glands has proved of inestimable value to humanity; and Dr. B. P. Babkin, Research Professor of Physiology, whose discoveries in relation to the behavior of gastric juices under the stimulus of varying substances are described. The article, though restrained enough in tone, leaves no doubt that Canadian physicians and surgeons are not lagging in the friendly struggle for world-wide supremacy.

Dr. H. S. Birkett's Resignation

Tribute to the outstanding position in the medical life of Canada attained by Dr. H. S. Birkett, C.B., M.D., LL.D., was voiced in the editorial columns of a number of the Dominion's newspapers when, following the meeting of the Board of Governors in August, it was announced that Dr. Birkett's resignation as Professor of Oto-Laryngology had been accepted, and that his appointment as Emeritus Professor of the same subject had been approved. Commenting on the announcement, the Montreal *Star* says, in part: "His eminence in his profession has always been a matter of pride to his fellow-workers, and his devotion to duty and self-sacrificing labours in behalf of McGill have won for him the admiration of alumni and students alike." Dr. Birkett's peace and war-time records of service are such that, though the tributes have been many, adequate recognition can with difficulty be afforded them.

McGill Men at Williamstown

At the annual session of the Institute of Politics, of Williamstown, Massachusetts, the Canadian Group, under Dean P. E. Corbett, of McGill, discussed "The Future of the British Commonwealth;" and, to the surprise of American delegates, if press reports are correct, voiced unanimously the opinion that disruption of the British Empire is an event that can only be regarded as extremely unlikely to occur. Professors T. W. L. MacDermot and F. R. Scott, of McGill, were members of Dean Corbett's group and both contributed materially to the conference's success. Speaking to the press, Dean Corbett said that the problems of the Empire at the moment were essentially problems of peace, not of war, but, when pressed for an answer in regard to possible wars, again amazed his American hearers by stating that, in the event of war, the Dominions almost certainly would support Great Britain with a measure of loyalty not appreciably different from that of 1914.

His Excellency Visits McGill

On the afternoon of July 6th, the University was honoured by a call on the part of its Visitor, His Excellency the Governor-General, who, in company with the Principal, the Dean of Medicine, the Curator of the University Museums, and others, inspected the Strathcona Museum in the Medical Building, the David Ross McCord National Museum, and the Peter Redpath Museum. His Excellency had some previous acquaintance with the University, through his having received an honorary degree at the Convocation in May. On that occasion, however, no opportunity for a quiet tour of the buildings was afforded. The Visitor, therefore, found much to interest him in July, and expressed satisfaction in the more intimate knowledge of McGill that he had been able to acquire.

A Coin of 300 B.C.

Among the items of interest acquired by the University since the last issue of the *News* was published is a properly authenticated Greek coin, probably minted in Syracuse about the year 300 B.C. The coin, which is the gift of Miss Alice Redpath, of Canterbury, England, is a thick, copper piece about three-fifths of an inch in diameter, bearing an indistinct head of a deity on the obverse, and on the reverse the figure of an unbridled and prancing horse. The donor of this valuable specimen is a niece of the founder of the Peter Redpath Museum.

Macdonald Graduates Prosper

Out of 91 graduate students who have taken advanced courses at Macdonald College in the past ten years, all but four, whose whereabouts are unknown, are continuing their specialized work and are placed in positions, for the most part, within the territory of the Dominion. These figures, the result of a survey recently completed, give assurance that Macdonald College is splendidly fulfilling the purpose for which it was founded, and is contributing a factor of great strength to the agricultural life of Canada.

Social Workers' School to Close

At the annual meeting of the Board of Governors in August, Sir Arthur Currie recommended that the appropriation for the School for Social Workers be discontinued, and this recommendation was unanimously accepted. Accordingly, no applications for admission to the School this autumn will be received, though instruction will be continued in order to permit students in their second year to complete the course and receive their diplomas. In view of the present financial condition of the University, the Governors felt that they could no longer support the diversion of funds necessary for the upkeep of the School. The opinion was expressed that the dissipation of the resources of the University in schools of this kind was unwise, and that, instead of spreading itself superficially over a wide area, the University should concentrate upon its primary functions, the discovery and propagation of knowledge. The Arts Survey Committee concurred in recommending a policy along such lines.

"1851 Scholarships"

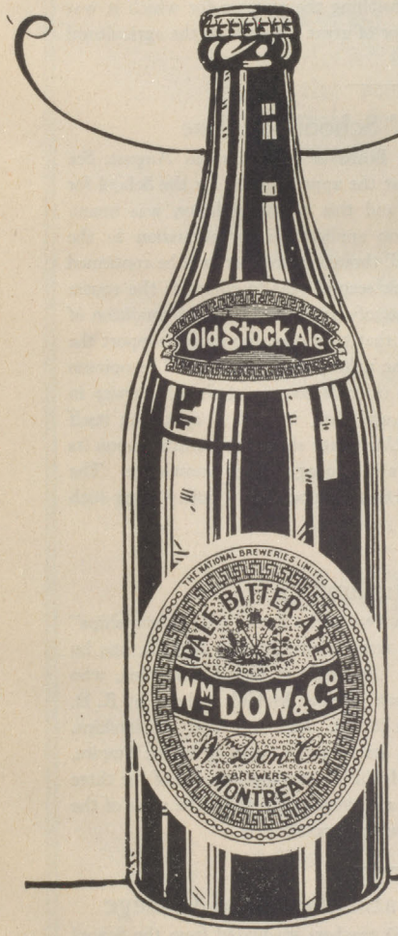
For the second year in succession, two of the three "1851 Scholarships" awarded to Canadians have been won by students at McGill, one by H. L. A. Tarr, a graduate of the University of British Columbia, who has spent three years in post-graduate work at McGill; and one by R. D. McRae, B.Sc. '27, M.Sc. '28, Ph.D. '30. Eight of these scholarships, each with a value of £250 a year, are awarded annually in the Empire, three in Canada. The success of McGill in winning two out of the three in consecutive years constitutes an achievement to which the press of the country has responded with generous congratulations.

Teachers Graduate at Macdonald College

With appropriate ceremonies, 163 teachers graduated from the School for Teachers at Macdonald College a few days after the June issue of the *News* went to press. Dr. W. P. Percival, Director of Protestant Education in the Province of Quebec, presented the diplomas; medals and prizes being presented by Sir Arthur Currie. That there was no unemployment among teachers to-day was a point brought out in a speech by Professor Sinclair Laird, Dean of the School, who remarked that of the 163 graduates, practically all had accepted teaching appointments for the coming year.

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Siamese Fighting Fish

Four Siamese fighting fish, two males and two females, were added to the aquarium of the Department of Zoology this summer. Although only the size of a finger or thumb, these fish are peculiarly pugnacious, and two males placed in a tank together will fight until one has been killed. With evenly-matched pairs, a fight to the death lasts about an hour, the fish squaring off like boxers, then flying at one another, biting, and striking with their fins and tails. The fish, found in Siam and Indo-China, are in this instance natives of Siam, and are particularly valuable, as they were imported direct, their pure stock not having been subjected to any intervening cross-breeding.

President of Dalhousie

On June 25 it was announced that Professor Carleton W. Stanley, Assistant to the Principal, had accepted appointment as the President of Dalhousie University, Halifax. Referring to the announcement, Sir Arthur Currie paid a warm tribute to Professor Stanley's services at McGill: "With sincere appreciation of the loss sustained by McGill University and the cause of Protestant education in the Province of Quebec, I cordially congratulate Dalhousie University on having secured the services of Professor Carleton Stanley as president of that institution."

British Society's Centenary

F. E. Lloyd, Macdonald Professor of Botany and Director of the Biological Building, and Fred Clarke, Professor of Education, are among the members of the University staff who will attend the centenary meeting of the British Society for the Advancement of Science in London this month. Professor Clarke, it is hoped, will present an article on the meeting in one of the next issues of the *News*.

Extra-Mural Relations

A minimum of 14,000 persons attended lectures delivered under the auspices of the Department of Extra-Mural Relations in the past year. The work of this department in no way concerns itself with intra-mural studies, and no University credit attaches to attendance at any of its lectures. Among the most unusual of the courses given in the period were lectures in French at the Seminary of St. Sulpice, and lectures in Chinese and English before the two branches of the newly-organized Hung Tao Society, of Montreal. Twenty-seven radio addresses were given by the Department; 20 speakers appeared before gatherings in all parts of the Dominion of Canadian Clubs; and the full roster of the Department's activity indicates that few parts of Canada failed to take advantage of the benefits which it is at once the Department's duty and privilege to extend.

Union College Honours Sir Arthur

At the 135th annual Commencement of Union College, Schenectady, New York, held on June 15th, Sir Arthur Currie, as this year's Honorary Chancellor of the College, was awarded the degree of LL.D. Dr. Frank P. Day, President of the College, who served under Sir Arthur in the Canadian Corps as Commanding Officer of the 25th Battalion, conferred the degree, saying, in part: "You have served splendidly in peace, as you have served gloriously in war. . . The bugle no longer sounds reveille for your men. . . but you live in their hearts, and for them you will always be the great Corps Commander. Honoris causa, we gladly bestow upon you the degree of Doctor of Laws and direct that your name be enrolled among the honorary alumni of Union College."

Adult Education in Labrador

Through the joint action of the educational authorities of the Province of Quebec and the Department of Extra-Mural Relations, McGill University, adult education was introduced into fishing centres on the Canadian Labrador coast this summer, a series of lectures giving older members of the sparse population knowledge and information regarding other sections of the Dominion. In June, it was also announced that discussions between the Dominion and Provincial Governments and the Department of Extra-Mural Relations had been inaugurated, with a view to assisting in the establishment of an industry through which the inhabitants of Labrador would supply eiderdown to the world's markets.

Delegates to Dental Congress

Early in the summer it was announced that representatives from the Faculty of Dentistry would attend the International Dental Congress in Paris in August. Dr. A. L. Walsh, Director of the Dental Clinic, Montreal General Hospital, it was stated, would act at the Congress as Chairman of the Section on Anatomy and History; and Dr. F. H. A. Baxter, Jr., would present a report on "Variations in the Composition of Saliva Under Different Conditions."

Dr. Kiang Kang-hu at Oregon

Deep interest has attached to lectures delivered at the University of Oregon this summer by the Director of McGill's Department of Chinese Studies, Dr. Kiang Kang-hu. The University of Oregon *Summer Session Sun* devotes considerable space to the doctor, and refers to a number of the more exciting events in his career, notably the three occasions in China when, for political reasons, his execution was ordered and seemed imminent. Dr. Kiang Kang-hu contributed to *The McGill News* last March, and an article from his pen on the subject of Communism in China centuries ago has been promised to us for next December.

A Course in Museum Technique

Announcement was made in June that the University had established a summer course in Medical Museum Technique, embracing 10 one-hour lectures and 20 two-hour laboratory periods, with an optional week including 12 three-hour laboratory periods. No such course is available elsewhere in Canada and, so far as is known, in few centres on this Continent. Students are instructed in the laying-out of medical museum space and in the details of how specimens are best mounted for satisfactory display and permanent preservation. The blowing of satisfactory glass containers is one feature of the varied curriculum presented.

A Memento of Lord Tennyson

Officials of the University Library announced recently the receipt from Mrs. Millicent Lord, widow of the late W. F. Lord, Esq., of 14 volumes of Tennyson, bound in rich red leather. These volumes were a wedding gift from the poet to Mrs Lord, who, remembering the high opinion of McGill formed by her husband as a result of a visit from England 25 years ago, has sent them to the University as a permanent memento.

Birks Scholar Appointed

According to an announcement from the Principal's office in mid-July, the English Committee named to select a candidate to come to McGill under the terms of the W. M. Birks Scholarship has appointed a scholar from Taunton School, Devonshire, who will this autumn begin a four-year course in Classics. A list of English Public School boys who will come to Canada this fall has been prepared in England and shows that, of the number listed, 12 will attend McGill, 4 will go to Queen's, 2 to the University of Toronto, and one each to Guelph Agricultural College and the University of British Columbia.

Banting Research Grants

Long-term and short-term grants for medical research, awarded by the trustees of the Banting Research Foundation in July, included a number to workers at McGill, among the former being: Miss A. M. Alley, M.A., and among the latter: Miss Ruth P. Dow, B.A., F. L. Horsfall, B.A., G. T. Evans, B.A., and Miss E. Rhoda Grant, M.A.

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The French Summer School

To the French Summer School of McGill University, which this year celebrated the 10th year of its existence, the press of Montreal has paid marked tribute. In an editorial on July 29th, the *Gazette* said, in part: "No fewer than 230 students registered and took the course, an increase of 40 compared with last year. Two nuns were among the students, mothers and daughters attended the same classes, and what is more noteworthy, the ages of students ranged from sixteen to seventy-six." Continuing, the editorial remarks that the School was honoured this year through the presence at its closing exercises of the University's Visitor, His Excellency the Governor-General, and pays tribute to the work in organizing and conducting the School of Professor Rene du Roure and his associates. "The effect," the *Gazette* states, "cannot be other than beneficial alike to students, to McGill University, and to the country."

Dean Corbett Lectures in Chicago

In an address delivered before the Harrison Foundation of the University of Chicago in July, P. E. CORBETT, Dean of the Faculty of Law, McGill University, stated that "Chicago's water steal" and the United States tariff were two of the chief sources of anti-American sentiment in Canada. Proceeding, Dean Corbett said that there was considerable belief in the Dominion that peaceful relations between the two countries had been maintained more through Canadian concessions than American justice. Despite such feeling, which admittedly exists in greater or lesser degree, Dean Corbett emphasized the fact that between Canada and the United States there is a fundamental attitude of peace and, in a very appreciable degree, of cordial good-will.

Chignecto Canal Commission

THE HONOURABLE DR. MANION, Dominion Minister of Railways and Canals, announced in July that an order-in-council had been passed naming DR. STEPHEN LEACOCK and two others as the members of a new Chignecto Canal Commission. The work to be undertaken will involve a study and report to the Government on the physical, economic, and national aspects of the proposal to connect the Straits of Northumberland and the Bay of Fundy by an 18-mile canal across the Isthmus of Chignecto. This canal, of which engineers have dreamed for nearly 250 years, would shorten the voyage from Saint John, N.B., to Montreal by some 600 miles, would bring the West Indies and South American ports two days' nearer Montreal and Quebec, and would shorten by at least 450 miles the water route which products from Prince Edward Island and northern New Brunswick must traverse to markets in the eastern United States.

Pathologists Meet in Geneva

DR. HOERST OERTEL, Strathcona Professor of Pathology, will represent McGill at the first meeting of the International Society for Geographical Pathology, to be held in Geneva, Switzerland, in October. The topic chosen for discussion on this occasion is cirrhosis of the liver, a disease regarding which, Dr. Oertel has stated in a press interview, there is much to be learned, and exchange of views and opinions is, therefore, most desirable.

Dr. Eve Visits Great Britain

DEAN A. S. EVE, of the Faculty of Graduate Studies and Research, sailed from Montreal late in June to represent McGill at the British Universities' Conference, held in Edinburgh in July. It was announced at the time of his sailing that he would also, in company with others, represent the University at the Faraday Centennial Celebration of the Royal Institution of Great Britain, and at the Annual Convention of the British Association for the Advancement of Science.



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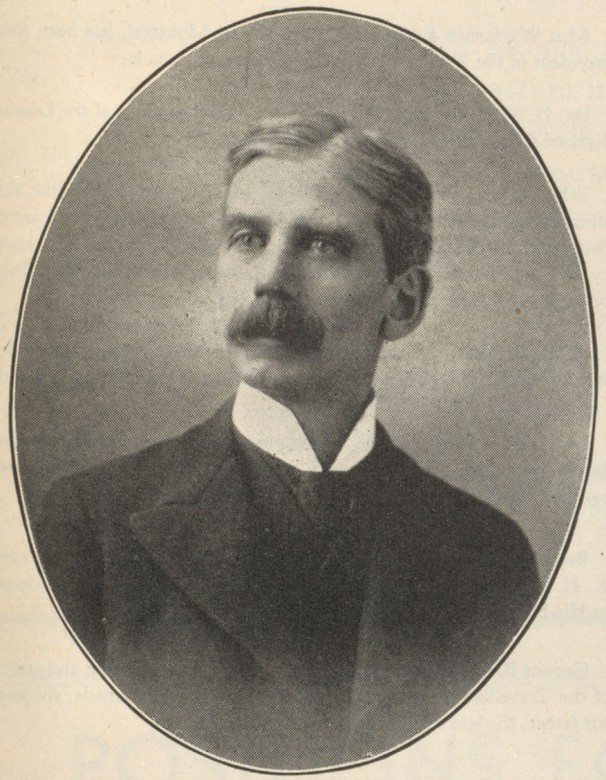
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Personals

The News welcomes from graduates personal items for inclusion in these columns. Press clippings or other data should be addressed to H. R. Morgan, Esq., c/o The Recorder Printing Co., Brockville, Ontario; or to the Executive Secretary, Graduates' Society, McGill University, Montreal.



DR. JAMES E. TRUEMAN, OF SAN JOSÉ, CALIFORNIA

whose recollections of Medicine, 1881, appear elsewhere in this issue of *The News*

F. R. Terroux, Arts '25, for the last three years 1851 Exhibition Scholar and science student at Emmanuel College, Cambridge, has been awarded the annual Sudbury-Hardyman prize of £30 for the best dissertation by a graduate under M. A. standing. Mr. Terroux's subject was "Beta Ray Spectrum of Radium E".

Dr. John Dodds Flagg, Med. '87, Licentiate of the Royal College of Physicians and Surgeons, Edinburgh, Scotland, has recently accepted appointment as Chief Surgeon and Executive Medical Officer of the Charity Eye, Ear, and Throat Hospital, of Buffalo, N.Y., where he has practised since 1888. This hospital was established in 1891, and at no time since that date has any member of the board or medical staff received any salary for the services they have rendered.

H. H. Hemming, Arts '14, who is a director of the Chase Harris Forbes Co., of London, England, has moved to Paris to serve with the French organization bearing the same name, with offices at 23 rue de la Paix.

The Quebec Provincial Scholarship, awarded last year to John T. Henderson, M.Sc., has been extended for another year. Mr. Henderson is studying atmospheric electricity at King's College, London University.

Miss Dorothy Heneker, who contributed an interesting article on Soviet Russia to the June number of the *News*, was in July unanimously re-elected President of the Canadian Federation of Business and Professional Women's Club.

L. Grange Woolley, B.A., '28, has received the degree of Doctor of the University of Paris. For his degree he presented a thesis on Richard Wagner, dealing in particular with the influence of Wagner's music on the French symbolist poets. Dr. Woolley now intends to enter the teaching profession in Canada.

Dr. R. Tait McKenzie, Arts '89, Med. '92, LL.D. '21, who retired from the post of Director of Physical Education at the University of Pennsylvania this spring, has been appointed Research Professor of Physical Education, an appointment that will permit him more opportunity to engage in the sculpture that has won him world-wide renown, at the same time preserving for the University of Pennsylvania the benefit of his counsel and the prestige of his name. Dr. McKenzie visited Ottawa this summer, to work in the Parliament Buildings on a marble memorial to the 60th anniversary of Confederation, presented by Canadians resident in the United States.

Joseph Dainow, who won a Provincial Scholarship in 1929, graduated this summer from Dijon University, France, with the degree of Doctor of Laws.

The Reverend W. G. Brown, Arts '99, of Saskatoon, has been elected Moderator of the Presbyterian Church in Canada. Since his ordination in 1902, he has served in home missions, particularly in Saskatchewan, where Presbyterian congregations have increased from 20 in 1925 to 110 at the present time.

Dr. H. M. Elder, Med. '23, son of the late Dr. J. M. Elder, Arts 81, Med. '85, sailed from Montreal in June to study the results of radium treatment of cancer in London and on the Continent. Dr. Elder is on the staff of the Montreal General Hospital, where radium is now being used extensively in treatment of cancer cases.

Professor William Caldwell, Emeritus Professor of Moral Philosophy, was received in audience this summer by King Alexander of Yugoslavia and by the Queen of Yugoslavia. While in Belgrade, Professor Caldwell lectured in French on "Ideals of Peace and the New Central Europe" and in English on "Canada and Her Place in the World To-day."

Dr. Arthur D. Holmes, Med. '89, President of the Board of Trustees of the Wayne County Medical Society, was honoured recently by a resolution of the society's council expressing thanks and gratitude for his faithful and distinguished service over a period of more than twenty years.

Dr. T. H. Scheffer, Arts '22, Med. '25, Assistant Medical Superintendent, Willard Parker Hospital, New York, is the joint author of a pathologic report on "Encephaltis and Encephalomyelitis in Measles," which has attracted widespread professional attention.

Among the officers of the Canadian Medical Association elected at the annual meeting held in Vancouver in June were:—Dr. A. T. Bazin, Med. '94, Chairman of the Council; Dr. F. S. Patch, Arts '99, Med. 03, Honorary Treasurer; and Dr. J. C. Meakins, Med. '04, Member of the Executive Committee.

GILBERT H. KING, Arts '31, has been named Scottish Exchange student for the present year. Last year's student was K. S. PITCAIRN, Arts '28, who has been studying at Edinburgh University.

PROFESSOR CARLETON W. STANLEY, Assistant to the Principal, was in June appointed President of Dalhousie University, Halifax, in succession to DR. A. STANLEY MACKENZIE, who had retired after twenty years in office.

Under Major-General R. U. PATTERSON, Med. '98, Surgeon-General of the Medical Corps, United States Army, approximately 1,000 officers are serving. So far as is known, DAVID A. MYERS, Med. '98, and JOSEPH F. GALLAGHER, Med. '14, now stationed at Fort Sam Houston, Texas, are the only McGill graduates in this number.

The HON. ALEXANDER C. RUTHERFORD, B.A. '81, B.C.L. '81, Chancellor of the University of Alberta, has been appointed to represent the Northern Alberta Branch of the Graduates Society at the McGill Graduates' Reunion in October. Officers of the Northern Alberta Branch, recently elected, include: The HON. A. C. RUTHERFORD, President; G. H. MACDONALD, B. Arch. '11, Treasurer; W. H. HARGRAVE, Sci. '07, 1st Vice-President; MRS MELROSE, 2nd Vice-President; R. S. L. WILSON, Sci. '11, Secretary.

G. LOCKHART GALL, Arts '13, Med. '16, who has practised in Birmingham, England, for the past three years, has now opened an office and is practising at 5110 Decarie Boulevard, Montreal.

DR. G. F. EVANS, Med. '00, has been appointed General Superintendent of the State Sanitarium, Hopemount, West Virginia, an institution with 450 patients, 7 attending physicians, and approximately 150 other employees.

After two years service with the Plant Research Department of the Shawinigan Chemicals, Limited, H. P. FORAN, B.A. '21, M.Sc. '22, is now on the editorial staff of Westman Publications, Limited, Toronto, publishers of *Canadian Chemistry & Metallurgy*, and other technical journals.

HARRY R. COCKFIELD, Arts '10, has been appointed a member of the Protestant Committee of the Council of Public Instruction for the Province of Quebec. The necessary order-in-council for Mr. Cockfield's appointment has been signed by the Lieut.-Governor.

On June 26th, the final day of the meetings of the Canadian Medical Association, Vancouver members of the Class of Medicine, '09, were hosts at a memorable luncheon to their classmates from other cities. Those present were: Drs. F. M. Auld, L. C. Conn, E. H. Funk, W. T. Ewing, A. C. Graves, S. C. McEwen, R. L. Miller, W. D. Patton, C. McLean, B. S. Smith, D. A. Dunbar, and George T. Wilson, all of whom are practising in British Columbia, with the exception of Dr. L. C. Conn, of Edmonton, Alberta.

DR. J. H. BOULTER, Arts '02, Med. '03, formerly of Beverly Hills, California, is now practising medicine and surgery in his home town, Picton, Ontario. He plans to attend the Graduates' Reunion in October.

DR. W. R. JAMIESON, Med. '98, of El Paso, Texas, is President of the Medical and Surgical Association of the Southwest. The annual meeting of this association will be held in Phoenix, Arizona, in November, and the President assures the *News* that any McGill men who might care to attend will be warmly welcomed.

DR. FRANK H. MILLER, Vet. '87, was the guest of honour, on June 6th, at a dinner tendered in Ithaca, to mark his retirement as a Trustee of Cornell University after 20 years' service. In concluding an address, referring to Dr. Miller's faithful and efficient service, President Livingston Farrand, of Cornell, presented Dr. Miller with an illuminated scroll, signed by his colleagues, and bearing witness to their appreciation of his work.

J. ARMITAGE EWING, K.C., Law '9", of Montreal, has been re-elected Commissioner of the Boy Scout organization in the Province of Quebec.

REV. E. BRUCE COPLAND, Arts '22, and Mrs. Copland, have resumed work at the Hwaiking, China, station of the United Church of Canada, after spending some time in South Fornosa.

REDFORD H. MULOCK, Sci. '09, of Montreal, who retired from the Royal Air Force in 1919, with the rank of group captain, has been appointed an honorary air-commodore of the Loyal Canadian Air Force.

MISS WINNIFRED KYDD, M.A., Arts '23, of Montreal, has been elected president of the National Council of Women of Canada.

DR. H. M. TORY, Arts '90, has been elected president of the League of Nations Society in Canada for a third term of office.

When REV. J. R. DOBSON, Arts '91, in June retired from the active ministry of the United Church of Canada, latterly as joint pastor of Fairmount-St. Giles' Church, Montreal, he was tendered a reception by that congregation and presented with a purse of gold, Mrs. Dobson being given a silver tea service by the ladies of the congregation.

W. E. DUNTON, past student, has been elected a director of the Bruck Silk Mills, Limited. He is also vice-president of Thrift Stores, Limited.

DR. JACK WRIGHT, Med. '28, who has represented Canada on several Davis Cup teams, has joined Hodgson Bros. & Dunton, investment bankers, Montreal.

BRIGADIER-GENERAL F. S. MEIGHEN, Arts '89, and GROUP CAPTAIN R. H. MULOCK, Sci. '09, have been appointed honorary aides-de-camp to His Excellency the Governor-General.

GEORGE B. FOSTER, Law '20, has been appointed legal agent and attorney of the Travellers' Insurance Co. for the Dominion of Canada, succeeding his father, the late Senator G. G. Foster, Law '81.

DR. J. J. OWER, Arts '05, Med. '90, professor of pathology at the University of Alberta, is spending the summer pursuing studies in Germany.

ARTHUR B. WOOD, Arts '92, recently completed 38 years with the Sun Life Assurance Company of Canada, of which he is vice-president. He is also actuary of the company.

DR. D. P. MOWRY, Dent. '17, of Montreal, attended the International Dental Congress in Paris, at which he read a paper.

J. R. DONALD, Arts '13, Sci. '13 of Montreal, has been re-elected president of the Canadian Chemical Association.

The University of Bishop's College, Lennoxville, Que., has conferred the honorary degree of Doctor of Civil Law upon the HON. R. A. E. GREENSHIELDS, Arts '83, Law '85, acting Chief Justice of the Superior Court of Montreal.

The Order of Scholastic Merit has been conferred by the Government of the Province of Quebec upon REV. DR. E. I. REXFORD, Arts '76, of Montreal, former principal of the Montreal Diocesan Theological College.

E. J. WATERSON, Arts '08, Law '11, assumed duty in August as Recorder of the City of Westmount, a new position, replacing that of President of the Westmount Police Court, held for 37 years by Edmond McMahon, Law '81, recently retired.

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W. M. Couper, K.C., Law '02, of Montreal, has been re-elected Chief Ranger of the Canadian Order of Foresters.

Major G. E. Cole, Sci. '06, has been promoted to the rank of lieutenant-colonel and to the command of the Algonquin Regiment, of Haileybury, Ont.

Dr. Robert Jonitz, Med. '30, has opened an office for the practice of medicine and surgery in East Orange, New Jersey.

Miss Genevieve Barre, Arts '27, of Montreal, has received the degree of Master of Arts from Columbia University.

Rev. Canon C. E. Jeakins, Arts '01, for some years rector of St. Jude's Church, Brantford, Ont., has been appointed rector of the Church of St. John the Evangelist, London, Ont.

When the annual meetings of the California Medical Association were held in San Francisco last April, a small group of McGill graduates held a reunion dinner. Those present included Drs. Ernest H. Falconer, Med. '11; J. M. Frawley, Med. '19; R. Christopher Leggo, Med. '19; C. F. Fluhmann, Med. '22; J. H. Feldman, Med. '23; Saxton Pope, Med. '28; John Dunphy, Med. '30; and Dr. Charles L. Connor, Pathologist to the Montreal General Hospital, 1926-27.

Maurice Tetreau, K.C., Law '10, has been appointed magistrate of the police court of Montreal, with magisterial jurisdiction over the entire Province of Quebec. He was appointed a special prosecutor in automobile cases by the Quebec government last year, and was one of the founders of the Kiwanis Club in Montreal.

Dr. L. P. MacHaffie, Med. '12, has been appointed full-time medical officer for the public schools of Ottawa. He is also secretary-treasurer of the Canadian Society for the Study of Diseases of Children.

Dr. H. M. Kinghorn, Arts '90, Med. '94, has been elected vice-president of the recently-formed Saranac Laboratory Academy of Medicine at Saranac Lake, N.Y.

The Hon. Senator J. H. King, Med. '95, has been appointed a Commander of the Order of the Hospital of St. John of Jerusalem, in which Dr. E. C. Fielde, Med. '81, of Montreal, becomes an Officer.

Newsprint Manufacture on Canada's Pacific Coast

(*Continued from Page 18*)

The Finishing of the Paper

Coming from the machine the newsprint is by no means ready for shipment. The original reel is taken off and re-wound to give tighter and more even rolls; during the re-winding, too, any breaks that may have occurred in the sheet are spliced. The reel is re-wound onto strong cardboard cores, and as this winding proceeds the paper is cut into such widths as are required by the buyers. Very common widths are 35 and 70 inches, but there are also many others.

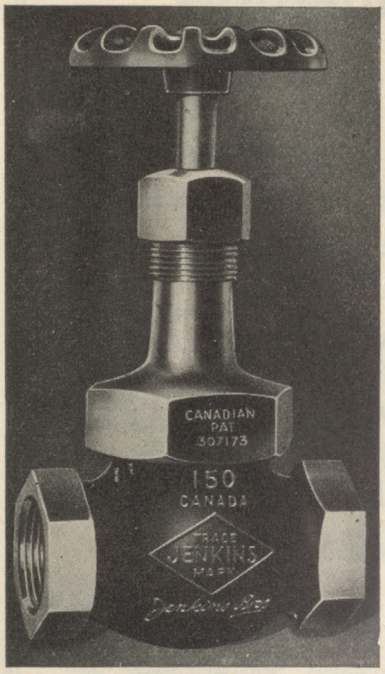
Before the rolls are shipped, they must be wrapped in such a manner as to protect them against the dangers incident to many types of transportation. When only the most modern methods of shipment are to be used, as to points in Canada and the United States, several thicknesses of heavy wrapping paper suffice to keep out moisture and prevent damage. In the case of rolls which are to journey to such faraway points as China and South America, the hazards of travel are many, and special "packs" have been designed to encase the paper.

In China the manner of unloading the rolls, reloading them into trains or trucks, and again unloading them at the warehouses is somewhat primitive, considerable of the moving being done by hand; so, in addition to the heavy wrapping paper, wooden ends are fitted onto the roll, and the whole is bound with steel bands. This pack will stand the rough travel without the paper sustaining any damage. For the journey to the inland portions of South America, the rolls often must be transferred from freighter to lighter in midstream, sometimes at the mercy of tidal waves or earthquakes; thence to a train; later to a small river boat in which the last stage of several hundred miles is covered. And even on arrival at the city or town where the paper is to be used, the rolls are occasionally pushed along the streets to their destination. To ensure the safety of the newsprint, it is completely encased in wooden boxes before leaving the mill. So with their varied types of clothing the rolls go out to places far and near, and the story of newsprint manufacture is complete.

However, one could not close such an account fairly without a brief mention of some of the sidelights of the actual process of manufacture. Alongside of those who actually work towards the production of the reel of newsprint, there is a host of craftsmen who ease the way. Millwrights and carpenters, electricians and expert mechanics, blacksmiths and tinsmiths, plumbers, pipe-fitters, and painters all find work to do in keeping the many parts of the mill in order, in executing repairs, and in working towards a greater physical efficiency. And in the engineering offices and the laboratories there is maintained a staff of men who examine critically the existing methods of manufacture and try to make full use of them, and, as well, experiment with new possibilities—always carrying forward the battle to obtain a better finished product at a lower cost.

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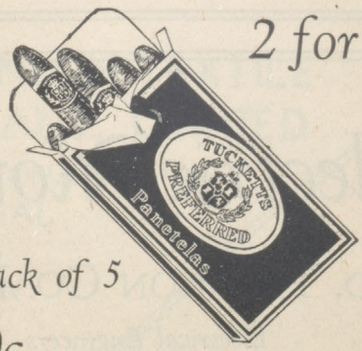
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Marriages

BALL—In Vancouver, B.C., on June 12th, Miss Marion Ruth Smith, and Ralph Henry Ball, Ph.D. '29, of Newark, N.J.

BETHEL—In New York City, on July 31st, Miss Eleanor R. Hickey, of Buffalo, N.Y., and Dr. John Perceval Bethel, Arts '24.

BLAU-WEINSTEIN—In Montreal, on August 9th, Miss Anna Phyllis Weinstein, Arts '30, and Dr. Abraham Blau, Arts '27, Med. '31, both of Montreal.

BROWN—In Montreal West, on June 5th, Miss Margaret Gale Brown, past student, daughter of F. Baylis Brown, M.Sc., Sci.'03, and Mrs. Brown, and Dr. John Archibald MacLennan, all of Montreal.

BUXTON—In Montreal, on June 24th, Miss Thelma Joyce Fraas and Kenneth S. Buxton, Ph.D. '29, of Hartford, Conn.

CARSON—In Montreal, on June 25th, Miss Isabelle Ross and Dr. James Rae Carson, Dent. '27, of Montreal.

CATE—In Boston, Mass., on May 14th, Miss Elizabeth Shurtleff, of Concord, N.H., and Carroll Lee Cate, Sci. '09, of Montreal.

COPPING—At Magog, Que., on June 6th, Miss Dorothy Lorraine Donald, of Magog, and Allan B. Copping, Sci. '21, of Corner Brook, Newfoundland.

CUSHING—In Montreal, on June 25th, Miss Mary MacRae and Rev. Charles Cushing, Arts '10, of Hazenmore, Sask.

DEBOYRIE—In June, Miss Edna Louise Shaver and Dr. Rafael DeBoyrie, Med. '29, of Montreal.

DOBLE—At Lost River, P.Q., in June, Miss Marjorie Doble, B.A. '29, and Edward N. Baillon, of Lasara, Northern Rhodesia.

EVANS-MURRAY—In Quebec, on June 27th, Miss Phyllis M. Murray, B.A. '24, M.A. '27, and Charles Durward Evans, B.Sc. '24, of Toronto.

FIANDER—In Montreal, on June 27th, Miss Ruth Winifred Hawley and the Reverend Richard Goodwin Fiander, Arts '28.

GROLEAU—In Westmount, P.Q., on June 6th, Miss Ruth Theresa Patterson and Arnold Groleau, Sci. '28, of Westmount.

HANLON—In Montreal, on May 29th, Miss Elizabeth Maclean Mudge, and Dr. Francis Woodward Hanlon, Med. '31, of Valhalla, N.Y.

HATFIELD-DAVIDSON—In Montreal, on June 26th, Miss E. Jeannette Davidson, B.A. '29, and Dr. Albert R. Hatfield, Med. '31, of Montreal.

HEENEY-YUILE—At Como, Que., on June 27th, Miss Margaret Yuile, Arts '30, daughter of N. M. Yuile, Sci. '99, of Montreal, and Arnold D. P. Heeney, Law '29, also of Montreal, son of Rev. Canon W. B. Heeney, Arts '99, and Mrs. Heeney, of Winnipeg.

HOOVER-PATTON—In Ormstown, P.Q., on June 27th, Miss Eunice I. Patton, B.A. '23, and Edward P. Hoover, B.A. '25, of Montreal.

HUNT—In Vancouver, B.C., on August 5th, Miss Jean Faulkner and Dr. Andrew Leigh Hunt, Med. '31, of Montreal.

LEGATE-MATHEWS—In Montreal, on June 27th, Miss Marjorie C. Matthews, B.A. '27, and David M. de C. Legate, B.A. '27.

MACCORDICK—In Westmount, Que., on July 25th, Miss Thelma Patricia Johnson and Dr. Alexander Howard MacCordick, Med. '08, of Montreal.

McGILLIS—On May 19th, at Three Rivers, Que., Miss Annie Wallace Bradshaw and Lester McGillis, Sci. '24, of Three Rivers.

McLEAN—In Buffalo, N.Y., in June, Miss Anne Florence Fitzsimons and Dr. Lewis F. McLean, Med. '27, of Buffalo.

McROBERTS-PARSONS—In Montreal, on July 16th, Miss Ruth Margaret Parsons, Phys. Ed. '26, and Dr. Jerry William McRoberts, Med. '29, of Rochester, Minn.

OVERING—In Toronto, on July 11th, Miss Aileen Cunningham Scherk and Robert Guy Alton Overing, past student.

PHELPS—In Montreal, on June 12th, Miss Roberta Estelle Morency and Dr. Victor Brock Phelps, Dent. '29, of Montreal.

RORKE—At Aurora, Ont., on June 20th, Miss Dorothy H. Locke and Charles Burrell Rorke, Sci. '23, of Montreal.

ROWLES-CHALK—In Montreal, on June 27th, Miss Laura M. Chalk, M.Sc., Ph.D., and Dr. William Rowles, M.Sc. '26, Ph.D. '28, of Macdonald College, P.Q.

SALTER-WARD—In Montreal, in June, Miss Ruth E. Ward, B. Sc. '26, and F. C. Salter Jr., B.Sc. '26.

SAWYER-MACKAY—In Montreal, in June, Miss Margaret Elizabeth MacKay, M.A. '29, and William Reginald Sawyer, Ph.D. '29, of Kingston, Ont.

SCOTT-MONCRIEFF—In Victoria, B.C., on July 9th, Miss Lois Margaret Gale and Dr. Ronald Scott-Moncrieff, Med. '30, of Victoria.

SELLER—In Montreal, on August 1st, Miss Margaret Cameron Shearer and Dr. Charles Reginald Seller, Dent. '27, of Montreal.

SHOTTON—At Kamloops, B.C., on June 30th, Miss Evelyn Williams, of Ormstown, Que., and Dr. John Allison Shotton, Med. '28, of Blue River, B.C.

SILVER—In Montreal, on June 17th, Miss Mary Edith Moore and Ralph Charles Silver, M.Sc., Arts '26, of Ottawa.

TAYLOR—In Montreal, in July, Miss Creola Payette and John Ross Taylor, Arts '14, Sci. '20, of Montreal.

TOMLINSON—In Montreal, on June 6th, Miss Ruth N. Tomlinson, B.Sc. '30, and Drummond Wilson, Montreal West.

WATSON—In Ottawa, in June, Miss Dorothy Ellinor Dodge and Cyril James Watson, Ph.D., Agr. '21.

WINTER—At Trenton, Ont., on June 6th, Miss Margery Adams Acer, of Trenton, and Francis Edward Winter, Sci. '26.

WYLDE—In Montreal, on May 28th, Miss Viola Allen McCulloch and Dr. Edmund W. Wylde, Med. '31, of Seattle, Wash.

Alumnae Notes

Women graduates in Montreal, who are willing to entertain visiting women graduates during the Reunion in October, will facilitate the work of the Reunion Committee if they will communicate with Mrs. V. LeDain, 922 Hartland Ave., Outremont. Telephone, Atlantic 3164.

The Alumnae Society will endeavour to extend hospitality to non-resident graduates, if they will notify Mrs. LeDain before September 30th.

The Alumnae Society is preparing a revised edition of "Women Graduates of McGill." It is hoped that this will be ready at the time of the Reunion. Changes of names or addresses since 1929 should be sent at once to Mrs. F. G. Charters, 765 Lexington Ave., Westmount.

McGill Alumnae Dinner, Friday, October 16

Women Graduates of all Departments and Faculties will be welcome at the Reunion Dinner for Women Graduates of McGill, arranged by the Alumnae Society. Graduates of the School for Graduate Nurses, of the Library School, of the School of Physical Education, of the Department of Social Service, and holders of diplomas in Music are cordially urged to attend.

The dinner will take place at the Windsor Hotel, and tickets ($3.00) may be purchased at the time of registration.

The Fifth Triennial Conference of the Canadian Federation of University Women was held in Ottawa on August 25, 26, and 27. Among those representing McGill were Miss Winifred Kydd, Miss C. I. Mackenzie, Mrs. Vaughan, Miss Louisa Fair, Miss H. I. Murchison, Miss Zerada Slack, Mrs. F. G. Charters, Mrs. A. T. Bone, Mrs. Seferovitch, and Mrs. M. T. Bancroft.

Miss Hurlbatt, after spending some weeks in Montreal, sailed at the end of July for England, where she expects to remain for the autumn and winter, returning to Montreal next spring.

ETHLYN TRAPP (Arts '13, Med. '27) spent the summer in Montreal and in Stockholm, Sweden, engaged in the study of radium. She will return to the practice of medicine in Vancouver this autumn.

ELSIE GRAHAM (Arts '19) is now a Laboratory Technician to seventeen physicians in a private clinic in Detroit, doing work in Serology and Bacteriology.

ESTHER LEWIS (Arts '21) has accepted a position with the Victoria Order of Nurses in Montreal.

VIRGINIA CAMERON (Arts '25) spent the summer in England, where she attended a summer school in mathematics for some weeks.



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Births

AMARON—In Montreal, on May 20th, to Errol C. Amaron, Arts '23, and Mrs. Amaron, (Alice Roy, Arts '23), a son.

ARMSTRONG—In Renfrew, Ont., on June 19th, to Rev. R. W. Armstrong, past student, and Mrs. Armstrong, of Morewood, Ont., a daughter.

BENETT—In Montreal, on August 1st, to C. M. Benett, past student, and Mrs. Benett, a daughter.

BLACHFORD—In Montreal, on July 14th, to H. Lloyd Blachford, Sci. '18, and Mrs. Blachford, a son.

CAMPBELL—In Montreal, on May 26th, to Dr. A. D. Campbell, Med. '11, and Mrs. Campbell, a son.

CASSIDY—In Montreal, on May 19th, to Dr. C. R. E. Cassidy, D.D.S., '24, and Mrs. Cassidy, a daughter.

CHIPMAN—In Montreal, on June 28th, to Warwick Chipman, Arts '01, Law '04, and Mrs. Chipman, a son.

CRAWFORD—In Montreal, on June 17th, to Dr. E. M. Crawford, Med. '27, and Mrs. Crawford, a daughter.

CRAWFORD—In Montreal, to R. Eric Crawford, Sci. '22, and Mrs. Crawford, (Myrtle McMillan, Arts '20), a son, stillborn.

CREASOR—In Montreal, on July 6th, to John A. Creasor, Sci. '14, and Mrs. Creasor, a son.

CUNNINGHAM—In Montreal, on May 28th, to Stanley H. Cunningham, Arts '13, Sci. '13, and Mrs. Cunningham, a son.

DOWD—In Ottawa, on May 13th, to Dr. W. R. Dowd, Arts '15, Med. '18, and Mrs. Dowd, a son.

FACEY—In Los Angeles, California, on May 16th, to Dr. F. D. Facey, Med. '20, and Mrs. Facey, a son.

FISHER—At Knowlton, Que., on June 29th, to Philip S. Fisher, Arts '16, and Mrs. Fisher, a daughter.

FOSS—In Montreal, on June 19th, to D. B. Foss, Sci. '23, and Mrs. Foss, a daughter.

FURSE—On May 22nd, to Mr. and Mrs. Charles F. Furse, (Grace E. Shearwood, Mus. B. '23), a son.

HACKETT—In Montreal, on July 18th, to F. Winfield Hackett, Law '17, and Mrs. Hackett, a daughter.

HERON—In Toronto, on May 21st, to A. W. Heron, past student, and Mrs. Heron, a daughter.

HOLDEN—In Montreal, on July 7th, to J. Hastie Holden, Sci. '23, and Mrs. Holden, a son.

HOWARD—In Montreal, on August 3rd, to Wilbert H. Howard, Law '15, and Mrs. Howard, a daughter.

KAY—In Montreal, on February 10th, to Stuart E. Kay, Sci. '21, and Mrs. Kay, of Larchmont, N.Y., a daughter.

KUNTZ—In Ottawa, on May 14th, to Dr. A. E. Kuntz, Med. '25, and Mrs. Kuntz, a daughter.

LLOYD—In Montreal, on May 15th, to Francis Llewellyn Lloyd, Arts '29, and Mrs. Lloyd, a daughter.

MACDERMOT—In Montreal, on May 30th, to Dr. Hugh Ernest MacDermot, Med. '13, and Mrs. MacDermot, a daughter.

MACKEEN—In Ottawa, on July 27th, to David W. MacKeen, Sci. '22, and Mrs. MacKeen, a daughter.

MAXWELL—At Cornwall, Ont., on July 11th, to Rev. Gordon N. Maxwell, past student, and Mrs. Maxwell, of Finch, Ont., a daughter.

MCLEOD—In Montreal, on June 29th, to Robert N. McLeod, Sci. '23, and Mrs. McLeod, a daughter.

MCNALLY—In Montreal, on August 1st, to Dr. W. J. McNally, Dent. '23, and Mrs. McNally, a son.

MESSENGER—At Walkerville, Ont., on June 3rd, to W. Aubrey Messenger, Sci. '22, and Mrs. Messenger, a daughter.

MINGIE—In Montreal, on June 22nd, to Dr. Walter Mingie, Med. '15, and Mrs. Mingie, a son.

PARSONS—At Biddeford, Me., on August 3rd, to Eric A. Parsons, past student, and Mrs. Parsons, a son.

QUINN—In Montreal, on June 25th, to Dr. John G. Quinn, Med. '23, and Mrs. Quinn, a daughter.

THOMPSON—In Montreal, on May 27th, to Dr. Allen Thompson, Med. '13, and Mrs. Thompson, a son.

WILSON—At Trenton, Ont., on April 20th, to William Bowman Wilson, Sci. '10, and Mrs. Wilson, a daughter.

WINDSOR—In Montreal, on June 5th, to J. R. Windsor, Sci. '20, and Mrs. Windsor, a son.

WOLFF—In Baltimore, Md., on June 19th, to Dr. T. C. Wolff, Med. '17, and Mrs. Wolff, a daughter.

The Position of McGill To-day

(*Continued from Page 14*)

types. We must not forget that by far the greater proportion of the 4000 students that have come to Macdonald for training during the last 24 years have been of type (a) and have gone back into farming life, representing an important constituency influenced by our teachings. But it is with the greatest pride that we note the record of the 287 graduates of this Faculty who have completed the full course leading to the degree of B.S.A.

53 are engaged in farming.
46 in professional or teaching positions.
110 in government positions.
39 in industrial and business positions.
22 in other occupations.
The remaining 17, unfortunately, have died.

The rapidly advancing science of agriculture in Canada has led to an increasing demand for more highly trained workers, and to meet this need Macdonald College gave the lead to other agricultural colleges of Canada, first by a strengthening of the work leading to the B.S.A., second by developing graduate work in many phases of agricultural science. Entrance requirements are now those of the University itself. Drastic changes in the curricula have been made. Sixty-nine men have already completed work leading to the post graduate degrees M.Sc., M.S.A. or Ph.D. at Macdonald, their contribution in the way of thesis projects being quite important to the, as yet, new body of research work in Canadian agriculture.

Macdonald College is in a unique position to serve as a great centre for research work in agriculture, and the field of research is extremely wide. In practically every branch of production and marketing there are puzzling questions that must be answered. Plans are now complete for a five-year programme on parasite work, involving an expenditure of some $70,000, contributions being made by the Quebec Government, the National Research Council and the Empire Marketing Board. Close coöperation with cognate departments at McGill, the recent appointments of Huskins in Genetics and Murray in Bacteriology, the appreciable numbers of students from the Old Country who come to us for degree and diploma work in Agriculture, will, I hope, in a very few years make Macdonald College a national and Empire centre for advanced studies and research. But, here again, we cannot develop until additional funds are at our disposal for the strengthening of the staff and the develop-

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ment of a group of research workers, for the necessary apparatus, facilities and supplies.

Earlier in my report I referred to the possible elimination of some departments. I wish now to recommend that the appropriation for the School for Social Workers be discontinued. In my opinion, too many of these schools have been established at McGill in days gone by. This particular school was founded in 1918. It was fostered by the Joint Board of Theological Colleges, by the Social Agencies of Montreal and by certain interested individuals. From the second year of its existence the School shows a deficit, yet despite this fact the outside financial support which had been instrumental in initiating the School was withdrawn, and in 1929 the yearly grant from the Joint Board of Theological Colleges was also withdrawn. The annual deficits grew, until last year the deficit amounted to nearly $5,500 for the session. This amount could, with great advantage, be applied to some of the worth-while departments.

Should you agree to my recommendation, I warn you that your attitude will not be universally approved, but I feel that, in view of the present financial condition of the University, we can no longer support the diversion of the funds necessary for the upkeep of this School. We fully sympathize with the need for trained social workers and with the part they play in community life, but I am of the opinion that the University as such would be doing its full duty and offering its best contribution by the provision within its walls, in the Social Science Departments, in Economics, Education, Psychology and Sociology, of that fundamental knowledge so necessary for the scientifically-trained social worker.

In my opinion, the dissipation of the resources of the University in schools of this kind is unwise, and that, instead of spreading itself superficially over a wide area, the University should content itself with digging a little deeper into the fundamentals, and that the undertaking of the practical training in connection with this school work must tend to weaken concentration of resources and attention upon the essential business of a university, which is the discovery and propagation of knowledge. I feel that the practice work in the training of social workers can be more properly undertaken by social agencies than by the University. I may add that the Arts Survey Committee unanimously supports me in this recommendation.

Building Programme

Let me conclude by saying a word about the necessary building programme.

1. The need of Dormitories has never been met.

2. We have no Gymnasium. I regard the provision of a Gymnasium as more important, for a beginning, than Dormitories. We are the only university or college or private school in Canada without a Gymnasium. Once the lectures for the day are over, there is nothing to draw the students back to the University precincts; they pass out of the gate and we do not see them again until the next day. Had we a Gymnasium, where they could assemble in the afternoon and play their games, their health would be better and they would be more likely to avoid those indiscretions to which some of them are prone. Further, it would help to develop a proper *esprit de corps*.

3. The Mining and Geology Building is more urgently needed than ever, especially in view of the large increase in the space requirements of the Department of Chemistry, which at present houses Mining and Metallurgy as well.

4. The requirements of the Library are very great indeed. Do you know that in a student body of 2500 there is only seating accommodation for 180? Professors and post graduate students, who use the library a very great deal, have no place there to which they may retire for reading and study. The growth of the use of the Library in the last ten years has been phenomenal,—another indication that the student body is becoming more and more intellectually inclined.

5. There are other requests for increased accommodation, but you will hear about these when the Survey Report is put into your hands.

Personals

Miss Ruth E. Moore, Arts '30, has received the degree of Master of Arts from Radcliffe College after having pursued post-graduate studies in Classics.

Recently returned from studies at Edinburgh University, Rev. D. H. MacVicar, Arts '25, has been inducted into the pastorate of the United Church at Ahuntsic, Que.

Rev. Nathan Noseworthy, Arts '30, has been appointed curate of St. Clements Church, Verdun, Que.

Following ordination to the priesthood of the Church of England in Canada, Rev. B. J. Thorpe, Arts '29, has been appointed to the parish of Bristol Corners, Que.

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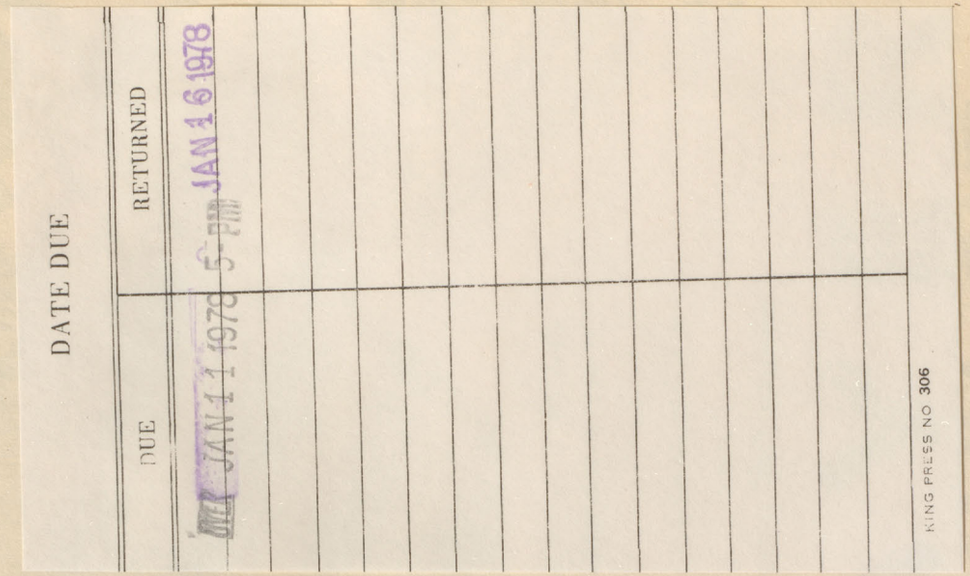
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